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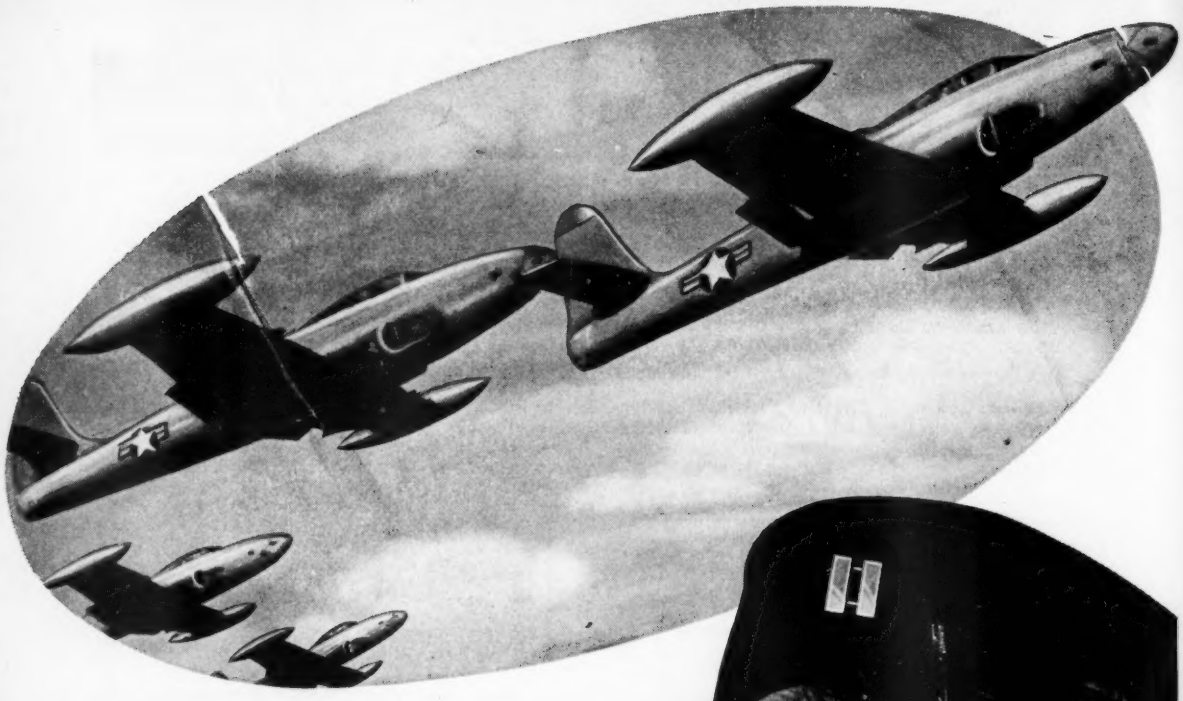

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Cerebral Palsy: THE NEUROLOGICAL BACKGROUND*

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INTRODUCTION

The term cerebral palsy, like the older term Little's Disease, loosely defines a variety of clinical syndromes and does not describe a disease. It would not be possible to conceive a definition that would adequately describe the disorder since within this large group, there is no homogeneity of clinical findings, each cerebro-palsied being an entity in himself. This in turn possibly reflects the variety of causitive agents and constellation of factors influencing and distorting function of the nervous system. Questions uppermost in the minds of those concerned in any way with disorders that arise in infancy and alter so completely the course of events for the victims are the etiology, the explanation for the variety of neurologic disorder, and treatment. These are the focal points of my interest and that of all neurologists. Moreover if we can develop the answers to these questions, specifically the answers to the first two, the neurologist has the valuable data that can explain any disease of the nervous system with the modifications for the age of the individual at the time the nervous system became altered or diseased. It is well known that alterations occurring before birth, at birth or in infancy and early childhood, that is before the maturation of the nervous system, may lead to syndromes somewhat different than when acquired injury or disease affects the fully developed normally organized nervous system.

Malformations of the neuro-axis. Although in our working concept of cerebral palsy we try to stick to disorders arising from brain disease, this is a false premise upon which to operate since some of the agents acting upon the brain result in spinal cord and peripheral nerve disorders. Many cord disorders can be excluded, others cannot. Diseased neurones in the brain affect development and function of the cord. Disease of the cord affects the function of its supra-structure, the brain. We are often inclined to overlook the effect of incoming stimuli from the periphery from muscles, skin, joint, viscera; through special sense organs, the eyes and ears; from thought and feeling. We are largely concerned with what we see and feel which is expressed in disturbed motor function, that is spasticity or flaccidity, spontaneous or induced abnormal movements. This disturbed motor function is greatly affected by all these incoming stimuli, precipitating, exaggerating, distorting the functional activity of motor systems.

Structural disorders of the neuro-axis may hark back to defective germ plasm, may result from hereditary factors or alterations in the embryo and fetus. It is impossible often to distinguish those congenital conditions due to faulty germ plasm from those that may be developed during intrauterine life. The effects of X-ray treatment in producing developmental anomalies in young animals has been demonstrated. There have been human cases where this has been observed. The effect of surgery upon the mother disturbing the internal environment of the fetus has been known to be a factor resulting in alteration in structure. Disorder of the nervous system and other anomalies in the child when the mother has had German measles in the first trimester of pregnancy is well documented.

The invasion of the fetal blood of a parasite or protozoan causing toxoplasmosis in the mother,

**Chairman: Advisory Committee, Easter Seal Cerebral Palsy Center.

*Read at joint meeting of the Wisconsin Chapter of the American Physical Therapy Association and Wisconsin Occupational Therapy Association at Veterans Administration Hospital, Madison, Wis., May 17, 1952.

often unrecognized, is a formidable cause but not a common one. It is a readily diagnosable disease in the child resulting in defective vision, hydrocephalus, mental deficiency, epilepsy and other alterations in function of the nervous system. Congenital syphilis, much reduced in incidence, belongs in this category. In general any agent affecting the developing germ plasm in the early weeks of pregnancy may produce the greatest deviation in structural development of body and brain. Small changes in the internal environment of the fetus may have the most serious consequences and these may never be recognized. Suffice it to say, anything that affects the health of the mother adversely may have its unpredictable effect on the child. These include a wide range of factors, toxins of disease and other infectious agents, nutrition of the mother either due to deprivations or disordered metabolism, conditions of the placenta and cord that may affect fetal circulation and items too numerous to mention and often not susceptible to proof.

Injury: Birth trauma is an important agent in producing cerebral defects. The effects of injury at birth include subdural hemorrhage with compression of the brain, laceration of membranes covering the brain, hemorrhages into the brain, softening due to ischemia, sometimes with formation of cysts upon survival. One point must be made clear and that is: injury may occur in non-instrumental, uncomplicated birth at term. Hemorrhages have been repeatedly shown to occur in premature infants in the germinal layer of the cerebrum when the birth has been easy. The very forces of labor itself, or a precipitate birth can be productive of injury to blood vessels and brain tissue. It has recently been shown by workers in the Montreal Neurological Institute using still born babies that pressures, similar to that occurring during labor and passage through the birth canal, exerted upon the head may force a portion of the undersurface of the temporal lobes through the incisura of the membrane separating the cerebral hemispheres from the brain stem and compress the choroidal artery supplying the neighboring brain. This experimental work was done to demonstrate the manner in which lesions were produced at birth which later produced psychomotor epilepsy. It was a brilliantly conceived experiment and has bearing on one way in which the brain can be injured during birth. As you know epilepsy occurs with great frequency in the cerebral palsied. It should not be necessary to mention that injudicious interference with the course of labor—through the use of drugs to hasten birth, drugs and anesthetic agents to soften the process or hold back the baby —may lead to hemorrhages and/or asphyxia. Other accidents such as severe hemorrhage of the mother or the cord around the baby's neck can result in hypoxia and selective brain necrosis. It has long been my conviction that hypoxia of varying degrees plays a leading role in production of choreoathetosis and other dystonic extrapyramidal syndromes.

Erythroblastosis fetalis, which is usually the result of blood incompatibility between mother and child, produces extrapyramidal disorder in the survivors.

Craniostenosis due to premature closing of skull sutures or other developmental skull abnormalities result, in many instances, in compression of brain and neural dysfunction. The explanation for these anomalies in man is not clear but it has been shown that rats deprived of Vitamin A developed neurologic lesions due totally to mechanical origin, the result of disproportion between skull and brain. Humans and rats are far apart but the experiment is of interest and provocative of thought.

Infections due to viral agents, encephalitis, post-infectious conditions in infancy and childhood—those disorders of the central nervous system that sometimes follow measles, mumps, chicken pox, and whooping cough—may produce severe damage to the nervous system. Pneumonia with severe involvement of respiration and interference with oxygen-carbon dioxide exchange may result in hypoxia.

Occasionally severe brain damage unexplainably follows pertussis, diphtheria, tetanus immunization. In debilitating diseases cerebral venous thromboses can occur; and as in adults, apoplexy with residual hemiplegia is a distinct syndrome in childhood. Finally severe repeated convulsions and prolonged coma may be accompanied by ischemic necrosis resulting in hemiplegia or an even more wide spread neurologic disorder.

So you can readily understand what is meant by the opening statement that cerebral palsy is not a disease entity—it is a bagful of pediatric disorders.

NEUROPHYSIOLOGY

Those who work with the cerebral palsied are struck by the unpredictable varying hypertonus, the bewildering array of abnormal movements and the grotesque postures. The descriptive classifications and the explanations in current use in cerebral palsy centers are archaic and in need of revision based upon the results of recent anatomical research. The reader is directed to the section by H. W. Magoun[1] in "The Symposium on Cerebral Palsy" at the New York Academy of Medicine, April 14, 1951.

The organization of the motor systems is complex. It is customary to think of the cortical representation of movement, that which can be volitionally initiated and controlled, to be in the central

1. Quarterly Review of Pediatrics, Vol. 2, No. 6, May, 1951.

area of each hemisphere with the extrapyramidal system as represented in the cortex lying anterior to the pyramidal or corticospinal system. Submerged between these lies an area deep in the central sulcus which when stimulated electrically brings about an inhibition of previously induced movement. To the extrapyramidal system has been ascribed the control of larger muscle masses such as the girdle muscles while the fine discreet movements of the parts (hands) used in highly skilled activity has been ascribed to the function of the cortical spinal system. The latter is made possible by the larger representation of the hand area, especially the opposing digit, the thumb. More recent investigations in the monkey and chimpanzee reveal that in addition to the above representation, there are at least two other motor areas, one to be found on the medial aspect of the central region of each hemisphere and another in the buried cortex of the insular region beneath the lateral convexity. It has also been proved that other motor cell groups are located posteriorly in what is considered to be cortical localization of various sensory activities.

The corticospinal system which originates in the precentral motor cortex has a long direct course through the brain stem to the spinal cord where it terminates in connection with sensory neurones and where, by means of short internuncial neurones, impulses are relayed to the anterior horn cells of the peripheral nerves whence they are conducted to muscles.

The extrapyramidal system is highly complex and its cortical system is projected to the basal nuclei of the upper brain stem and to the reticulospinal systems traversing the brain stem and spinal cord, these in turn modifying the activity of the anterior horn cells. The functioning of these combined motor systems whose fibers are of different sizes with different conduction rates results in smooth, easily modifiable muscle function. This function is subject to change through incoming impulses from the muscles, tendons and joints by way of sensory nerves and may be influenced by sensory connections in the spinal cord and at higher levels including the cortex. In addition muscle activity controlling movement and posture is influenced through the special sensory organs concerned with hearing equilibrium and vision. Through the emotions and connections between the frontal lobe cortex and certain centers in the upper main stem (diencephalon) another influence is brought to bear on muscle tone and movement.

SPASTICITY

Much confusion is found in cerebral palsy literature in the concepts regarding spasticity. Indeed it is not clear how rigidity is differentiated from spasticity—having common dictionary definitions, the use of these terms by cerebral palsy workers and neurologists generally is empirical. Rigidity, as used usually by neurologists, refers to a type of hypertonus seen characteristically in parkinsonism in which there is moldable, pliable resistance rather evenly distributed in all skeletal muscles including those of the midline. In the extremities an intermittent release of tonus during passive movement is felt and is referred to as a "cogwheel" phenomenon. The chief error seen frequently is the concept of the origin of spasticity. At one time the phenomenon of spasticity was ascribed to disorders of the pyramidal system. Now it is generally held that hypertonus, exaggerated reflexes and clonus, all phenomena dependent on the operation of the stretch reflex, are manifestations of disorder of the extrapyramidal system. Experimental lesions limited to the pyramidal system results not in hypertonus or increased resistance to manipulation and does not show hyperactivity of tendon reflexes. Hence these signs must be due to a disorder of some parts of the extrapyramidal system. Lesions placed on one side of the motor cortex devoted to the pyramidal system (area 4) results in flaccid weakness of the extremities of the opposite side with a certain degree of spasticity only in the digits. If the injury is carried forward into the extrapyramidal area including 4S (suppressor) and area 6 the spasticity extends proximally to involve the larger muscle groups, and owing to the larger muscle masses attaching the extremities to the trunk, the spasticity is most intense in the girdle muscles. There is sufficient documentary evidence to indicate that conditions are similar in man. The extrapyramidal systems are most complex indeed with connections between cortex and lower centers in the brain which are intimately interrelated. Thus the cortex of the extrapyramidal system is brought into relation with the several groups of nuclei in the basal ganglia, with the red nucleus in the midbrain, with the cerebellum and with the reticular systems of the lower brain stem. There appears in health to be a nice balance between the suppressor or inhibitor systems of cortical and cerebellar organs and the facilitatory system in the brain stem whose impulses are mediated to the spinal cord by the reticulospinal system. When the suppressor system is removed by injury there is enhancement of spasticity and reflex activity of extremities. This stretch evoked spasticity is most marked in the extensors. Although it has been usual to speak of spasticity and abnormal movement as phenomena of release, it has been shown that there is actually an augmentation to stretch phenomena which seems to depend upon a facilitatory influx from the brain normally held in check by the operation of the suppressor systems.

The Babinski sign has always been of great importance to the neurologist and with the changing concepts with regard to spasticity it remains the

one sign which implicates the cortical spinal system in any disease process involving motor pathways. It consists of two components, a dorsal flexion of the great toe and in some instances plantar flexion and fanning of the other toes. The latter is thought to represent implication of the extrapyramidal system. When present the sign is elicited by pressure and stroking the sole of the foot along its lateral margin and extending to the ball of the foot.

Pure motor syndromes, at least uncomplicated pyramidal disease, are not apt to occur except at the hands of the experimentalist for disease and injury are not apt to be so conveniently circumscribed and hence overlapping of fiber tracts and cell complexes usually occur. The disposition of spasticity and the degree of the response to all forms of stimuli are determined by the extent and location of the underlying pathology. Thus spasticity may be the chief manifestation, but in a considerable proportion of cases, abnormal movements, spontaneous or induced, may accompany spasticity. Spasticity may be absent and hypotonia prevail. Ataxia often accompanies the latter but may accompany spasticity.

INVOLUNTARY MOVEMENT

Until recently the localization of the disease processes causing the various kinds of involuntary movement have depended upon pathologic changes in human beings and almost nothing was known about the modus operandi. It has been generally agreed that lesions in the brain stem with its numerous connections between centers in basal nuclei, thalamus, the midbrain and cerebellum were responsible for abnormal movement. Recently it has been possible to reproduce tremor and athetosis in the experimental animal. Two general theories have been advanced to explain athetosis, chorea and tremor. One theory involves a circuit made up of projections from the cortical extrapyramidal motor area to the basal nuclei and to the thalamus with a return to the cortex modifying cortically initiated movement. A break in this circuit results in choreoathetosis. Other circuits are suggested for other types of abnormal movement. A second view holds that the modification occurs at spinal levels by means of the impulses mediated by the reticulospinal system which might be looked upon as the final common pathway for the various extrapyramidal connections of higher levels. Disease at various points in the upper brain stem, the midbrain and pons alters the normal flow or the timing of impulses descending to the spinal neurones, according to this theory. There is evidence for both views.

For orientation, involuntary movements derived from disorder of the brain stem will be defined or described. In a purely descriptive analysis, the posture at the rest and the pattern of hyperkinesis should be observed. Simple movements of flexion, extension, pronation, supination, elevation or rotation may be easy to analyze but other types of movement are not as simple, but are composites of a sequence of different movements. As a rule complicated patterns do not resemble purposive or expressive movements while simple motor patterns may resemble a purposeful act. The choreic movement may be mistaken for a purposeful act while no one would mistake the choreathetotic movement as having conscious purposeful direction.

1. *Myoclonus* is the name given to brief twitchings of part of a muscle by Herz and Putnam but which according to general conceptions are repeated simple movements involving antagonist muscles, reciprocally innervated, such as is observed in ankle clonus, palatal myoclonus or the simple single jerks of extremities as seen in myoclonic epilepsy, such as an isolated flexion-extension movement of leg or arm.

2. *Tics* are brief contractions of whole muscles accompanied by motion of the affected part, for example a rapid tic or twitching of the angle of the mouth such as might usher in a focal facial seizure. There are more complicated tics involving neighboring muscles, such as face, neck and shoulder muscles best seen in so-called spastic torticollis. These are found in disease of the midbrain connections with cerebellum and have been observed in encephalitis, arteriosclerosis and chronic degenerative diseases. Tics may be so bizarre that the observer too readily labels them as hysterical. Vocal tics resulting in barking noises or verbal activity suggestive of schizophrenic coined phrases and attacks of over-breathing sometimes associated with other stereotyped motor activity have been seen in chronic epidemic encephalitis. Oculogyric spasm and blepharospasm might fall into this general category of complicated tics of organic disease.

3. *Alternating tremors* are alternating movements at regular intervals produced by contractions alternately of agonist and antagonist muscles. The best example is the tremor of parkinsonism occurring at rest, usually arrested by voluntary motion or by action of any sort. Occasionally the parkinsonian tremor is not damped but is increased by action. It is associated with a rigidity of a plastic modable type, said to be due to continuous innervation of both protagonist and antagonist.

4. *Intention tremors* occur during action and thought to be due to disease of efferent cerebellar tracts as classically seen in multiple sclerosis. Senile tremors are usually of this order.

5. *Chorea*: Choreic movements are irregular, involuntary, isolated and simple. Distal parts of extremities, fingers, hands, toes and feet are most frequently affected. Flexion or extension, prona-

tion or supination, adduction, abduction or opposition may follow one another forming various combinations by simultaneous movement of several parts at a time. The movements are suggestive of purposeful activity though they usually interfere with accomplishing a true objective. In advanced chorea, the hyperkinesis spreads to proximal parts of extremities, to shoulders, trunk and face. At rest the choreic extremity is hypotonic and reflexes may be absent. If knee jerks are present there is often a pendular response to the knee jerks due to lack of correction of the extensor thrust by contraction of flexors.

6. *Ballisms* are wide massive flail-like movements predominantly of the proximal parts of the extremities. In pure form they are usually hemilateral (hemiballism), rarely bilateral and caused by softening, hemorrhage or tumor in very restricted area of the midbrain.

7. *Athetosis* is a form of slow, sustained irregular, involuntary movement. In choreic movements and in simple voluntary movement the part moved is continuously and rapidly shifted from one position to another with little or no opposition from the antagonists. The athetotic movement does not take this same continuous course from start to finish. First a tightening and stiffening of many or all muscles of the affected part sets in and only then the part is moved to the end point and this position is rigidly maintained for a time, resisting voluntary relaxation or passive resistance to overcome it. This increase in tension is characteristic of athetotic movements whereas less tension of antagonists is present in the rapid movements of chorea. The two are often combined. Hence, the term, choreoathetosis.

8. *Dystonia*: Dystonic movements are slow, long sustained turning movements of head and trunk with rotations of extremities on their long axes. These are accompanied by long sustained tensions of opposing group of muscles simultaneously with the twisting. Physiologically these movements suggest athetosis but they are longer sustained and, late in disorder, lead to sustained postures in which the spontaneous movement is lost. Dystonic symptoms may come on years after the primary lesion.

There are certain characteristics of abnormal movements and disorder of basal ganglia and their connecting pathways that should be understood; they are usually enhanced, exaggerated, or precipitated by emotional tension; they are less active or completely abolished with repose and contentment in quiet isolation. By exercise of the will they may be held in abeyance for a short time though often at the expense of increasing the phenomenon in another part than the one being concentrated upon. Hence the choreic child may on command hold hands still but activity in legs increases. Choreic movements may arise spontaneously or they may develop upon initiation of purposeful movement, aborting that movement or causing it to fail in its objective.

TREATMENT

Any forward looking program for the cerebral palsied must look for an understanding of the role played by the neurosurgeon in the reduction of spasticity, rigidity and spontaneous abnormal movement. Basic for this understanding are the investigations of the research worker in neural anatomy and neurophysiology. While it may seem incongruous to translate the results of experimental work on monkeys to humans suffering from disease, there is abundant evidence from well documented human material confirming findings of the experimentalist. Many problems in neurophysiology are unsolved and there exist many gaps in our information. Even so elementary a detail as the nature and propagation of the nerve impulse is not entirely clear. But many of the parts of the puzzle have fallen into place in recent years and some order is coming out of our former confusion. Success of a future program must be built on a sound structure of physiology, not on the empiricisms of the past for which neither the clinical neurologist nor the experimental neurophysiologist is responsible. It has been amply demonstrated in other fields of medicine that the best and quickest solution of a problem derives from the cooperative efforts of a variety of special workers. The problem presented by the cerebral palsied requires the cooperation of workers from a number of fields: neuropsychiatry, physical medicine, pediatrics, orthopedics, speech pathology, ear and eye and medical electronics, education, social service as well as lay workers dedicated to the promotion of the enterprise.

A proper evaluation of each child, the nature and extent of his neuromuscular disorder, must be taken into conjunction with estimation of intelligence, emotional stability and social maturity. The addition of epilepsy especially if difficult to control is a complicating factor in the rehabilitation program. The severity of the neuromuscular disorder especially when severe dystonia or athetosis is present may determine the goal to be set in a rehabilitation program and serious mental deficiency may limit efforts at rehabilitation and call for custodial care.

Physical and occupational therapists are key persons in the cerebral palsy team. They have a special set of skills, the result of intensive education in muscle physiology. Although much is known of neurophysiology this knowledge has not as yet been converted into skills specifically designed to combat varied combined neuromuscular dysfunctions. The therapist is by

(*Continued on page 79*)

RESEARCH - A GUIDEPOST FOR GROWTH

HYMAN BRANDT, Ph.D.
A.O.T.A. Research Consultant

Growth implies the widening of horizons, the acquisition of new facts integrated into previously accumulated knowledge. Thus an awareness and understanding of the general principles underlying activities labeled as "research" is basic to the growth process. This is true whether the therapist participates in a research project or whether he utilizes the findings of others to furnish ready solutions to his own particular problems. For both endeavors—doing research or studying the researches of others—require the therapist to develop a "feel" for data. This "feeling for data" is not intuitive but is the result of a well-organized, self-learning program for developing a critical attitude toward the quality and quantity of the assembled evidence; reasoning logically from this evidence, maintaining a judicious perspective toward the entire study; and exercising good judgment in fitting the specific recommendations (arising from the study) to a particular situation.

The important point is to discover the relationships underlying the facts; mere fact-finding, census taking or record-keeping where the sole purpose is to accumulate data, is not research. Research is characterized by a careful quest for new knowledge; it is a *search* for new material which will help reorder, revise, or better interpret existing knowledge. It must add something new to the previous body of known facts. Thus a study may be limited or extensive. It is exceedingly important that the novice in research delimit his study. Just as big oaks from little acorns grow, big researches will come after good little ones have paved the way. Then again the research problem itself may be significant or trivial. It is quite difficult to judge the ultimate importance of a problem in the light of the "ignorance" prevalent in the total field. Do it anyway. Finding a solution will remove one of the difficulties and pave the way for other studies which may be more significant.

QUALITIES OF THE INVESTIGATOR

One of the immediate questions certain to arise is that of the personal qualities required of the therapist engaged in research activities. The list is long but the following warrant some comment.

1. The therapist must possess a desire to secure facts and be cautious in the manner of their statement. It is essential that an individual be able to distinguish among theories, opinions, beliefs and facts and aim continuously to secure the facts as a basis for the beliefs held. It is also important to recognize, particularly in occupational therapy, that one is dealing with facts which are not pure black or white but varying shades of gray. Every statement must be well balanced with as many pertinent qualifiers as are necessary.

2. The therapist must possess a sense of the interrelationships of the various factors involved in the problem under study. This is most important in order that the therapist may properly evaluate the relationships present in his data and arrive at recommendations which are most satisfactory in the light of existing conditions.

3. The therapist must possess a disciplined imagination—be prudent, judicious and sensible.

The emphasis here is on the work, disciplined. Idle or wild flights of fancy produce very little in the long run. The imaginative behavior must be closely tied to the practical problems at hand; the ingenuity thus evoked will be channelized into fruitful hypotheses which can be realistically experimented with in the attempts to arrive at workable solutions.

4. The therapist must possess intellectual honesty. This is an essential quality since the therapist must take the data as it comes and treat it as objectively as possible. It is frequently quite tempting to "adjust" it so that it will fit into an anticipated pattern. Such temptations may become very great, especially if no one else has ready access to the data. These temptations must be resolutely conquered and the attitude of "let the chips fall where they may" prevail at all times. The achievement of an inconclusive or negative result need not be viewed as an overwhelming disaster or frustration but rather as a spur to further investigations to track down the elusive variables.

5. The therapist must possess great patience. This quality becomes especially important when the study is dependent upon the gathering of data which involves the cooperation of many individuals in various capacities—subjects and supplementary record gatherers—who may not attach the same importance to the study as you do. Somehow deadlines approach very rapidly because of delays and every effort must be made to attain a calm patience in order to achieve proper results from the study.

6. The therapist must be very accurate. It goes without saying that accuracy is a desirable trait in all circumstances. It is particularly necessary in the conduct of research studies. Checks and rechecks should be established at all points to insure accuracy in the treatment of the data. Since the find-

1. Presented 35th annual conference, American Occupational Therapy Association, Milwaukee, Wisconsin, August, 1952.

ings will most likely affect future decisions and programs, it is essential that they be accurate.

7. The therapist must be cooperative. Emphasis in recent years has been placed on the group concept or team approach in research activities as well as in purely operational ones. The day of the researcher sitting alone in his ivory tower is pretty much a part of the past. Group investigation in all phases of the research—study-planning, gathering the data, analyzing the data, drawing conclusions—is most dependent upon the cooperation of all concerned.

8. The therapist must be interested in a specific goal. It may seem foolish to say this but one does not "research" just for the sake of researching. It is not a blue-sky, idealistic venture. Research is an earnest, thoughtful and "back-breaking" endeavor to find a solution to a practical, albeit vexing, problem.

ESSENTIALS OF INVESTIGATIVE PROCEDURE

The next question to arise is that of the proper procedure to be employed by the therapist in carrying out a research study. The following is suggested as some of the essentials of investigative procedure.

1. A careful logical analysis of the problem must be made to determine specifically what is to be investigated so that trial or working hypotheses may be set up to give shape and direction to the research study. Such hypotheses must be defined in direct, positive and simple terms in the light of the known facts and must be amenable to testing to achieve verification or disproof.

2. Define all the terms, concepts, statistical units and measures that are employed in unequivocal terms so that others will understand everything that has been done in the course of the investigation. This will enable others to repeat the analysis and test the generalization if they wish to do so.

3. Collect only that data which is pertinent to the study. Collection of any other data is wasteful, space-consuming and it may prejudice the data really needed by trying the patience of the "guinea-pig." If some of the required data are already available, do not ask for them again in subsequent undertakings.

4. Classify and tabulate the data in the simplest, most economical fashion so as to discover existing similarities and differences, sequences or relationships. The statistics to be employed in this connection should have been determined in advance. They are part of the planning and direction of the study. Data should not be collected without knowing in advance how the information is going to be used. The treatment determines the type of data, the amount of data needed as well as the manner in which the material is to be collected.

Determination of the significance of relationships is always a pressing problem whether it be a question of true differences with respect to methods of treatment, types of patients, categories of institutions or the attempt to relate a specific method to a successful treatment. All these relationships are not generally expressed in terms of cause and effect; there are too many uncontrolled variables. Concomitant variation or association (the picture usually obtained in the social sciences) must be expressed in terms of *likelihood* of occurrence. Statistical probability becomes the key indicator. A belief is expressed in terms of a true difference or no difference; a particular degree of relationship between two or among several variables as occurring in so many chances in a hundred or thousand.

5. The conclusions should be formulated in sound and reasonable terms on the basis of the data that has been amassed and analyzed. They must be in line with the trial hypotheses and serve as a means of proving or disproving them. They must not be based on any prevailing prejudices, whether personal or otherwise. The most important point is not to over-reach oneself. The most damaging criticism usually made of conclusions drawn is that generalizations have been made from too few or unrepresentative cases. It is advisable therefore to conclude specifically about what has been demonstrated (the case load, the department, the institution) rather than to say that it has been demonstrated for all such patients or the entire field.

One other point should be mentioned. The researcher usually starts with some tentative conclusion about what he will accomplish in the study. Sometimes things don't quite work out that way. Indeterminate or negative results may be obtained. Although discouraging; such results may act as a spur to further efforts. Retracing the study, step by step, may indicate a clue for a better method, a better means of obtaining or analyzing data. A great deal may or may not be salvaged but the lesson learned is that this particular procedure won't work.

6. The entire study should be reported in such a manner that others can test and verify the conclusions. This means that every single step in the study—definition and delineation of the problem, the experimental design, the methods of treating and analyzing the data, the drawing of conclusions, the making of generalizations or recommendations—must be so definitely and clearly stated as to make it possible for anyone to test the findings in a repetition of the study with their own sets of cases. It may be said at this point that it would be all to the good if many studies were repeated to see whether original findings would hold up under repetitive investigations. It must not be assumed that a single study answers a question once and

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OCCUPATIONAL THERAPY FOR RHEUMATIC AND CARDIAC CHILDREN

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The consideration of the patient as a whole is an acknowledged requirement for good therapeutic results in medicine. Play is an integral part in the growth and development of children and therefore must be included in planning for their total care, particularly during long-term hospitalization. This may be provided in a general hospital through a recreational and occupational therapy program of medically suitable activities, with the purpose of favoring the best possible adjustment for these children and fostering continued normal development.

The purpose of this paper is to report on such a program developed for children hospitalized with heart disease or rheumatic fever with or without cardiac involvement. This project was initiated as part of a two year pilot study† on various aspects of the total care of the rheumatic and cardiac child. A registered occupational therapist guided the program and supervised the volunteer workers who spent varying periods of time on the wards. These "toy ladies" or "substitute mothers", recruited by the recreation service for children of Bellevue Hospital, received special orientation in the purposes and execution of this program. Having demonstrated its value this program is being continued through combined support from the hospital and the recreation service.

EMOTIONAL STRESSES OF ILLNESS

Certain well recognized and basic factors concerning the effects of illness and hospitalization on the child should be reconsidered by the therapist or another member of a hospital staff when organizing a program which will help to fulfill the needs of hospitalized children. Under normal circumstances, the healthy and secure child has ample scope to give expression to his physical and emotional needs. He is usually exuberantly active, insatiably curious and seemingly able to absorb any amount of healthy love and affection along with recognition and approval. Through play, his natural medium of expression, he learns about himself in relation to others and his environment as he develops many of his physical and mental resources. Play is his main occupation, and exercises all his energies and imagination. In cooperative as well as competitive play with his contemporaries, he has the opportunity to exchange ideas, match skills and compare notes on life experiences; all of which are a part of growing up and important to personality formation. For the hospitalized child the avenues of expression through play are greatly curtailed at a time when his emotional needs are heightened by the factors both of illness and separation from home. His total activities are limited not only to indoors but in many instances are further restricted to the confines of his bed.

The occurrence of illness may effect many and variant changes in a child. His reactions and behavior are altered by the illness itself; irritability, restlessness, capriciousness and a greater need for security with increased demands for attention are all part of the picture. The range and degree of such manifestations are only partially dependent on the type and severity of the illness and treatment necessary. Other equally important influencing factors in the variation of reactions under stress of illness are the basic emotional pattern, security and training of the individual child prior to the illness as well as the reactions and attitudes manifested by his parents concerning the illness.

Hospitalization of a child in the majority of cases is attended by additional stresses and problems. The fact that hospital care is considered necessary frequently heightens the degree of parental anxiety which is readily transmitted to the child. The fears engendered in children concerning an illness are far more frequently due to associated events than to their own knowledge of the seriousness of the disease. Indication of a child's memory of the alarm and confusion which may occur in the home preceding hospitalization is illustrated in the following account given by a 5 year old when telling a story about "a little girl going to the hospital". "Mother called doctor. Mother said if she couldn't eat her lunch she'd have to go to the hospital. Mother called doctor. Doctor called mother. She couldn't eat. Mother scolded her. She couldn't drink. Mother cried. Boy called father, nurse called doctor. Mother combed her hair. She felt sick. Yes, yes, mother. No, no, mother. Doctor said 'go to the hospital'." Whatever fears exist, they are readily increased with admission to the hospital and separation from parents and the particular love and warmth the child may have had at home. Frequently the child feels that he is being abandoned as one small boy kept reiterating through his tears, "My daddy brought me here: my daddy left me here; will my daddy come back?" As part of this fear of rejection some children may interpret

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an illness as punishment with hospitalization a form of discipline. It is difficult for them to accept or find any comfort in parental attempts at reassurance that hospitalization "is for your own good." There are usually the added fears created by unfamiliar surroundings and adjustment to care by strangers. The child must also learn to share the attention of the hospital personnel with others when his individual need for affection is enhanced both by illness and separation from home. The various laboratory tests and necessary medications add other burdens of disagreeable experiences and fears. In the face of these emotional stresses the child is confronted with curtailment of his usual type of emotional outlet through physical activity. In addition to these stresses there is likely to be boredom, a combination sure to create difficulty in the adjustment of any hospitalized child.

Problems related to rheumatic fever and heart disease: To these factors which affect hospitalized children in general there are additional problems in children with heart disease and active rheumatic fever. Primarily one is dealing with the effects of a relatively long-term illness. Bed rest for active rheumatic fever is not a matter of days but of weeks and frequently months, and is usually followed after discharge from the hospital by a period of time in a convalescent home. Such length of separation from the normal developmental experience of home and community enhances the importance of special efforts to provide the child with a hospital program of positive experiences and outlets to allow for continued healthy development of the personality. Secondly, it must be stressed that because active rheumatic fever is a disease which may recur, readmission to the hospital may be necessary in the future. Therefore favorable reaction to hospitalization is most desirable. Another factor important in dealing with rheumatic fever is the recognition that in a certain proportion of cases there will be irreversible heart damage. Where this damage is of sufficient degree these children will have to learn to adjust to some permanent limitations of their activities. Hence the maintenance of a positive outlook on life and of continued growth towards real maturity of mind and emotions in rheumatic and cardiac patients is of vital importance both for their present and future adjustments.

In relation to the long term bed care these children often have a source of distinct conflict in their difficulty of understanding the nature of their illness and necessity for such bed rest and continued medical treatment. When swelling and pain of the joints is present in active rheumatic fever this is an obvious and real fact to the child and can be accepted as such. This is usually but a transient event and of least serious import in the course of active rheumatic fever. The saying that this disease "licks the joints but bites the heart" is a somewhat dramatic statement which, however, contains the truth that degree of involvement of the heart is of paramount importance in the individual case. This necessitates frequent examination of the heart by various clinical and laboratory measures and directs the child's and parents' attention and concern to this organ. Children have considerable difficulty in understanding a portion of the body which they cannot see and therefore have vague and confused ideas concerning actual or possible heart disease. Many of them are aware that this is a vital organ both from their own knowledge of anatomy and from comments overheard in the past about adults dying of "heart attacks" and they may have distinct personal although frequently unexpressed fears. On the other hand except when marked rheumatic inflammation of the heart is present the child neither has pain in the region of the heart nor feels particularly ill. It is hence baffling to him why he must rest in bed when actually he feels full of "up and do" once the acute phase has passed and obvious symptoms have disappeared. Although the physician tries to explain the nature of the "sick heart" to the child in terms which are understandable and yet not alarming, this is a difficult matter in terms of interpretation. It is certain that many children must consider their treatment as a matter of adult and medical authority without any real comprehension of why they must accept the rules of such authority. They do not even have the "badge of sickness" such as they see in the bandages and casts of the surgical and orthopedic patients. It is more than easy to see why a rheumatic fever patient may profoundly resent the bed care, the repeated blood tests and certain forms of treatment necessarily given by hypodermic injection. Despite all these features it is remarkable to see how the vast majority of children do adjust to hospitalization especially when provided with satisfactory and medically appropriate means of emotional outlet.

ORGANIZATION OF THE PROGRAM

In our experience the facilities of a recreational and occupational therapy program have proven to fulfill many of the needs of these children. It is possible that the therapist and workers can bring a special type of support, understanding and means of outlet to the child largely because they are not identified either with the medical personnel or with anxious parents. This recreational program represents a pleasurable aspect of hospitalization, and the knowledge that the program is still in existence eases the tensions of children who are readmitted for further treatment, a fact often commented on by medical observers and parents alike.

To maintain self confidence and stability children must have the opportunity to express their aggres-

sive impulses. Illness and hospitalization tend to increase tensions. At the same time, however, these circumstances necessitate the curtailment of those strenuous types of activity and competitive play which had previously afforded these children opportunities for outlets and self assertion. To solve this problem the purposes in the organization of a hospital recreation program are to provide a range of substitute activities which are physically safe at various advisable levels of exertion, and then to encourage the children to express and release their aggressive impulses through such medically acceptable outlets. In an atmosphere as permissive as possible the positive aspects of what is a desirable activity rather than the negative aspects of what is prohibited should be emphasized to minimize feelings of invalidism, to reduce persistence or development of emotional stress and to achieve release of mental and physical tensions. The program should not only serve as an outlet but should stimulate and meet the interests of growing children.

Recreational wants of the child are relatively easy to satisfy while he is acutely ill. Fever and the accompanying fatigue contribute to his listlessness, and the mere presence of an adult ready to read a story or participate in play for short periods of time is sufficient. However, with improvement there are demands for more activities and the desire to return to forms of play participated in prior to the onset of illness. The period of slow regression of active rheumatic fever as well as the time when adjustment to limitations must be made in those cases where heart damage has occurred are the phases which pose the most challenging aspect of a program of recreational and occupational therapy for the rheumatic and cardiac child.

Close contact of the director of the program with doctors and nursing personnel permits exchange of information relative to medical, social and emotional needs of the individual patient. Activities can then be geared in accordance with the amount of physical exertion the rheumatic or cardiac status allows at a given time. An equal consideration should be given to the individual emotional needs as to the formulated outlines of "graded activity" and "cardiac classifications." The activities must be developed around the individual child's interests and desires as well as directed into both constructive and cooperative channels. Of the various methods and techniques explored in the project at Bellevue Hospital a report is given of some of those which seemed to provide the most beneficial as well as practical activities on the wards.

The regret has been frequently expressed in the past that liaison between medical and occupational therapy personnel may be difficult. Experience during the existence of this project however showed keen interest of the medical personnel and their cooperation towards the success of the program which they considered an integral and essential part of treatment.

Outlets through individual activities: The importance of meeting individual needs must be kept in the forefront of attention in the provision of appropriate outlets. The problems caused by illness and long term hospitalization vary greatly as previously described and must be approached on an individual basis. The child may react with depression and withdrawal and only through individual attention can he gradually be drawn into accepting and being accepted in group activities. Tense, fearful, aggressive or destructive reactions in like manner must receive individualized outlets which ultimately lead to greater relaxation and cooperation in the total hospital care program. Attention to special interests and talents with specific efforts to help bring these out and encourage their development in the individual child aid in increasing his sense of personal worth. Two instances may serve as illustrations:

Billy, a seven year old boy with active rheumatic fever was very resentful at the time of admission to the ward. He demanded a great number of toys and was generally disruptive during the recreation period. His attention span seemed to be limited, and at the same time he was extremely destructive of toys. Billy was given an old alarm clock and screw driver and was told that he could do with the clock whatever he wished. He could not at first believe his ears and asked again if he *really* could do anything he wished with it, requesting step by step confirmation of this as he dismantled the clock. Finally, as he uncoiled all the springs and spun the wheels on his table, many of the tensions which apparently existed in him seemed to relax. He became more cooperative and less interested in destructive activities.

Edward, a 12 year old boy, was admitted twice during a two-year period. Although usually cooperative and cheerful, it was occasionally reported to the therapist that he was a behavior problem and a disruptive influence on the ward when the nurse was alone and busy with hospital routine. Since he showed a particular liking and dexterity in leather work, he was encouraged to go beyond the usual projects and make articles for exhibits and demonstration samples. Although patterns were provided at first, he soon proved to combine his knowledge with his own ideas and fashioned many original articles. At the same time, his skill with construction toys warranted special attention to develop his talents along these lines and advanced equipment was provided. Upon his second admission to the hospital, his assistance was enlisted for teaching other ward patients in the construction of various projects while he also contributed to the repair of toys.

As in these two examples, there is a positive correlation between opportunities for self-expression and cooperative behavior with most children. Easing of individual problems also decreases group tensions as the uncooperative and disruptive child adopts more acceptable attitudes.

Manual activities allow for a wide range of appropriate outlets. In provision for free expression extensive use has been made of such materials as clay, paints and crayons. With a minimum of

physical effort these provide media for emotional projection. To allow as much imaginative scope as possible the children were unsupervised as to subject matter and little guidance was given as to techniques to prevent tensions in this area. In keeping with their individual capabilities they improved their skills or achieved expression through color combinations with obvious signs of satisfaction. A large bulletin board was mounted on the ward wall for display of paintings and drawings. There was no selective criteria; all pictures merited temporary hanging as they were produced. Although an activity such as the use of hammer and nails with cork boards needed closer supervision this seeemd to provide for considerable release of physical tension with but little physical effort.

In the employment of craft activities attention was paid to their value as a means of exploring and utilizing skills rather than insistence that the finished article meet with adult standards of perfection. Whatever ideas the child contributed in working with the materials was wholeheartedly welcomed and much credit was given on the creation of original patterns and designs. Some startlingly attractive projects in leather work, needle work, copper foil, copper wire and felt were produced through such encouragement. While learning manual techniques the child was at the same time given a sense of purpose by considering the use of such articles not only for himself but as possible gifts for his family or friends. When interest was evinced in a particular activity, encouragement was given to explore its further potentialities towards the development of permanent interests and hobbies. Their usefulness in the hospital to the child is not their only asset. If in the future some limitation of physical activity is necessary, these newly acquired hobbies or broadened interests lay the groundwork for agreeable, useful as well as a suitably quiet type of endeavor during and beyond the convalescent period.

Among the games adaptable for bed patients beyond the acute phase of sickness, chess was found to be one of the most popular for both boys and girls. Interest was initially aroused by introducing it as a Chess Club, membership for which was gained through winning a "Bellevue Chess Club" button awarded to each as he learned to play. The children teamed up among themselves, helped new patients with the game, and often played with doctors and nurses. Interest in chess has proven to carry over both into convalescent homes and family life. A volunteer whom the children call "Chess Lady" comes regularly to the wards and whenever possible has enlisted the assistance of recognized experts in the game. The children are delighted to match their skill with the "Champs". Although all games including chess have an element of the contest in them, competition is not emphasized and tournaments are never conducted since it is felt that during hospitalization anxieties about winning or losing should be kept to a minimum. It is explained to them and the children accept without difficulty that the "Chess Lady" or "Champion" would win because of their greater experience in the game. In all games winning "set-ups" for the children are usually explained as such. A realistic attitude interpreted in kindly manner is helpful in the effort to prevent the development of a subtle form of invalidism. It is important that a child should not consider his incapacity as a reason or means by which normal life experiences will change their usual course in his behalf or at his command.

In all activities as much freedom as possible is given in the selection and use of equipment, toys and games suitable for various age groups. Restriction of use of certain inappropriate or delicate articles may be indicated because of lack of ability or experience or destructive tendencies. This requires understanding in the substitution of another more suitable medium for the individual needs. Certain modifications of program may be necessary at times but total denial of participation in the recreation period as means of punishment for past or current misbehavior is carefully avoided.

Children enjoy learning about subjects allied to projects they create. Thus provision of appropriate books about means of transportation at the time model boats or trains are being constructed can enhance the recreational aspects with broader educational values. The growing of seeds and caring for plants on the ward provided an opportunity for learning about germination and growth. A segment of agricultural procedure was demonstrated when the children grew grass in aluminum trays and spoke of "plowing under one crop" in order to plant more seeds. An indignant complaint by a child that "my plant won't look at me—it keeps looking out the window" made possible further explanation about necessity of light and sun for growth. Planting terrariums and setting up an aquarium on the ward affords many opportunities for the introduction of nature study, which can then be amplified by means of books and pictures as well as by the use of mounted animal, insect and plant specimens borrowed from museums or other educational sources.

Through the medium of films much material of interest can be obtained in the form of "shorts" on subjects of nature, travel, adventure and sports. The movies are of course very popular being a familiar form of entertainment. Provisions were made for showing films once a week and this was an event marked with keen anticipation. To avoid films which greatly overstimulate or cause anxiety

to the children careful screening is important for the selection of appropriate presentations. A long "Western" for example would not be advisable both because the prolonged tenseness would prove fatiguing and also would tend to promote continued overactivity in the group due to the usual tendency of children to reenact exciting scenes.

Group activities and community interests: Since hospitalization for rheumatic fever may keep the child away from his former social group over long periods of time hospital group activities as well as measures to help maintain a feeling of contact with his family and the community at large are of real importance.

It is essential that the child be helped where necessary to accept and to be accepted by the group on the ward. Maintaining and developing the ability to relate to others in the principles of democratic living is particularly necessary for future adjustment. Hence the importance of group activities which provide opportunities for the type of experiences in which all can participate and also help create a sense of community life within the ward. Furthermore group experiences draw attention to others and away from the illness.

Difficulties that one might have expected in group activities for reasons of differences in ages or of ethnic origin were found to be minimal. Special care was necessary not to favor anyone. Occasionally it was helpful to bring such problems into the open by group discussions or to talk them over with individuals. There were differences of opinion, but also much sharing and exchanging of ideas. Important decisions were often relegated to discussion and a vote. Allowances for leadership and the designation of certain responsibilities for the older members were worthwhile. The older children were also encouraged to help the younger ones in many of the activities. In order to create or reinforce a sense of pride in the cultural background of children with language handicap or from a minority group, various positive approaches were utilized, such as learning and exchanging songs of other countries, basing party themes on different cultures, encouraging stories to be told and written about interesting facts in varied backgrounds and choosing films on pertinent subjects. It was constantly amazing how quickly cultural and language differences could be bridged in the group situation.

Group singing is very popular including the collection and exchange of new songs and the making of song scrap books. Although the singing usually comes about spontaneously it can be introduced for quieting or relaxing purposes when this seems necessary.

Putting on a play or puppet and shadow shows interested most of the children. It is important that all participating be relaxed about the production and do not strain for quality of performance. A successful performance of a play was based on the story of *Cinderella.* The children reconstructed the parts to fit into the ward setting. They made up their own lines, designed and made their costumes and pooled their ideas for staging the play. The more active parts were taken by the ambulatory children who very skillfully maneuvered their action to relate smoothly to actors who were bed patients. Each child took some part in this production and derived a great deal of satisfaction and sense of achievement from the fact that the audience clapped at the end.

Another avenue of expression and opportunity for cooperative effort is provided by the *Children's Newspaper,* a set of several mimeographed sheets which is printed periodically. The younger children often dictate their stories to the older ones who also assume the responsibility of stapling the pages into editions. When the newspaper is distributed the contributors display obvious pleasure and pride in pointing out their own stories, riddles, poems or pictures to nurses, doctors and visitors. Continued interest in the newspaper can be seen from the fact that many children have sent in contributions after discharge to home or convalescent care.

All children like parties and they readily catch the spirit of planning together, whether it be a party for a birthday, a holiday, a special event, or just for fun. They participate actively in the making of cards, gifts, favors, ward decorations or costumes. They are ingenious at giving the event a special flavor of intimacy. One 12 year old who asked to plan her own birthday party decided to send invitations to each child on the ward creating the atmosphere of their going to a party. On the eve of the party cards and gifts are prepared on the ward in the presence of the birthday child, but they all cooperate to maintain a make-believe of secrecy so the event can have all the elements of a surprise.

Many children feel that a party is no party without ice cream and cake and although these are often provided, they have much satisfaction in the making of their own refreshments. Popcorn popped on the wards in an electric popper and the making of pink lemonade have been the main events at some parties. They have also enjoyed making candies, icing and decorating cookies and stuffing dates and prunes. Even though fireless recipes are used, the children call this activity "cooking" and an atmosphere of home prevails.

Maintenance of outside interests and contacts: Under normal circumstances outside the hospital, children have the opportunity of broadening their scope of interests through social contacts and participation in community activities. For children in

the hospital means must be provided through group activities and individual encouragement to maintain and foster such relations and interests and to prevent a sense of isolation from the outside world.

In order to help maintain emotional ties, letter writing and the making of gifts for their family and friends were encouraged. Interest in other groups of children was brought about by exchanging greeting cards and by arranging joint projects with other wards. One hospital service project in which the cardiac children engaged was the making of special toys for deaf patients. The same spirit and interest was seen in the spontaneous collection of toys from their own supplies for overseas children.

Various community activities can be brought into the ward setting. Cub Scouting was appropriate in the hospital because of its readily adaptable program for indoor activity. The sponsors, the scout master, the den chiefs and den mothers who come in from the outside for weekly meetings help to keep alive the feeling of contact with the community. A Campfire Bluebird group on the girls' ward also fulfilled these objectives. Provision was made for continued membership in neighborhood clubs.

Actual participation in neighborhood activities was possible by having the hospital children enter exhibits in craft and other shows held at outside clubs. One such exhibit for a nearby flower show consisted of a scene of a Puerto Rican house and garden built on a large aluminum tray. The enjoyment that the children experienced in creating the cardboard house and palm trees and growing the grass for the lawn was obviously augmented by the knowledge that they were taking part in a community event.

MATERIALS

Types of material: Toys, games and other equipment were selected for their manipulative, creative or dramatic value. In order that the children may continue their hobbies and interests at home, emphasis was given to play material and craft supplies which could be obtained with relative ease by a family of modest means. For example, milk cartons were often used in making buildings, trucks and other vehicles and also as containers for planting seeds. Inexpensive plane and train models have been supplied, but this was followed up by using scrap pieces of wood from carpenter shops to fashion other models. Used greeting cards, discarded stockings, upholstery leather scraps, shoe boxes and oatmeal boxes were a few items utilized.

Use of material: In the use of toys and games there was generally the tendency on the part of adults to expect distinct differences from boys and girls. It has been observed, however, that given the opportunity the children themselves do not always make the traditional choices. Boys have played enthusiastically with doll furniture and dishes, as have the girls with tinker toys and trucks. Boys do not shun a certain amount of needlework and enjoyed cooking as wholeheartedly as girls. Props such as grown-ups' clothes or doctor kits encouraged informal dramatic play allowing the acting out of phases of family life or hospital experiences.

With wide divergence of ages on the wards, the greatest difficulty encountered was in the pursuance of certain craft projects which seemed particularly important for older children but too advanced for the younger ones. Even though these activities were modified, in some instances the younger members were not satisfied and tended to be disruptive by their insistence on having the same things. Under such circumstances the more advanced crafts were undertaken on those occasions when a sufficient number of volunteers could provide equally appealing separate activities for the younger group.

Source of material: Most of the material and equipment used in the program were selected from supplies donated to the children's recreation service. The community at large was tapped through interested individuals, clubs, social and educational organizations, business firms and toy supply houses. While many of the donations of scrap materials such as leather, fabrics, paper, used toys and games, came through personal contacts, much of it has come as a result of newspaper publicity. What was not obtained by donation, such as certain educational toys and craft materials, had to be purchased. It was found that continuous effort to keep the public informed as to the needs of the children was necessary. Many individuals and supply houses are receptive to the idea of regular donations to help hospital children. A slide projector and movie projector were donated through funds raised by a men's club and films and slides are regularly obtained through free sources such as foundations, museums and commercial organizations.

CONCLUSION

Children hospitalized for active rheumatic fever and rheumatic or congenital cardiac conditions have special needs due to various factors in their illness which heighten physical and emotional tensions and may create problems in the immediate and future psychologic adjustment of such children. The length of hospital care which is frequently necessary separates them from family and other social ties and contacts over long periods of time. At the same time restrictions are imposed on the accustomed outlets of strenuous play and competitive activities whereby a child normally finds scope for self assertion and release for physi-

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PSYCHOLOGICAL PROBLEMS WITH GERIATRIC PATIENTS

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Too often today we hear the competent, active older person referred to as an "exceptional person". Ever so many uninformed individuals are prone to think of the normal manifestations of old age in terms of deterioration, senility, forgetfulness and the older person is too often thought of as having lost his capacity for judgment and his ability to make decisions for himself.

In order to understand the role of the older person, we must realize that chronological aging and biological aging are not synonymous. Older men and women are not cut to one pattern any more than men and women in other age groups. They are individuals regardless of age. Just what an older person is like is determined by environmental factors, personality patterns, by life experiences, by emotional dissatisfactions, stresses and strains which arise during the years. When you look at yourself thirty years from now, you too will reflect what your experiences, your difficulties, and your pleasures have done to you. Each individual then, in old age, is different from any other and should be considered and treated as an individual.

Older people can and do learn new things; they do not have to live in a "second childhood." They have much to live for if life is meaningful to them. If the older one's interest is maintained and everyday living is meaningful, there is less inclination for the individual to turn to the past but as the older person's world shrinks, he too becomes more isolated and confused.

It is a fact that the number of aged in our population is ever increasing. Today we have some 10 million people over 65 years of age right in our own country. Reliable statistics indicate that by 1980 this number of 10 million will have increased to that of 26 million. Are our services for this aged group increasing in proportion to their increase? I am afraid not. While medical science is making it easier for people to grow old, the cultural pattern is making it more and more difficult. We are confronted with problems of our older citizens—problems of employment, living arrangements, physical and mental health maintenance, recreation, creative activities and educational pursuits just to mention a few. The needs and wants of our older folks are not too many or are they too complicated.

What every older person really wants is a sense of being physically, socially and mentally effective. He wants some degree of responsibility, he wants to be of use, he wants an interest that will give him some status or importance, he wants love and companionship. Loneliness and idleness are among the greatest enemies of the aged. Idleness does much more than just "kill time". It kills initiatives, interests and it broadens feelings of defeatism and throughness, insecurity and depression. As old friends and family disappear, the older person's feeling of isolation grows; he finds situations more and more perplexing. Add to this his enforced retirement because of chronological aging and we find many bewildered, older persons whose mental health is at stake.

We would, of course, like to see our older citizens living in their own community, pretty much managing their own affairs with a sufficient degree of security and happiness. However we must be realistic and face a group of older, dependent, some chronically ill individuals who must resort to living in a home where full custodial care is rendered. It is just this type group of older folks who reside at the New York City Home; some 1650 older folks whose average age is 70 years. Practically all enter the Home broken by the hardships of life. Most are without family; many are without friends. All upon admission seem to have abandoned every hope of any further place in society. Many of these oldsters feel insecure and disillusioned because of society's attitude toward the older citizen. Some enter the Home with hatred toward kin because of living arrangement difficulties, whether for economic, social or emotional reasons. Others have forsaken every hope of usefulness because of chronic illness or because of recent handicaps. Some find it difficult to adjust to group dwelling while language barriers limit many to isolation and conservatism. Practically all are reluctant to attempt new activities because of a fear of failure. Many have lost their self-respect, self esteem, interest, and many possess feelings of defeatism and throughness. With our older, handicapped folks, the picture is even more drab. They feel that everything in life is lost. Society has compelled them to quit the work-a-day world. With some anxieties, conflicts and tensions are so great that early suicide attempts were tried. All are in need of love and companionship. They crave recognition and a feeling of being wanted. All need an interest or responsibility that will give them

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NATIONALLY SPEAKING

President's Address

The greatest single problem facing us today is staff shortages. There is a crying need for more trained occupational therapists. It is our problem; it is our privilege to act. We must act.

In view of this statement, it is my pleasure to announce that the National Foundation for Infantile Paralysis has given a grant of $16,000 to the American Occupational Therapy Association in recognition of its need and in anticipation of its action. This is timely and appreciated help.

The national office of the A.O.T.A. and the publicity and recruitment committee are coordinating an intensive recruitment program within this current year. Actual participants are the occupational therapist at large. It will require a little effort by each one of us to provide the most effective program and derive the greatest benefit from the financial grant. The program is to be spearheaded from four directions. (1) The national office will seek the professional counsel and service of a firm experienced in public relations. It will produce printed materials in the form of pamphlets, brochures and posters to tell our story. It will provide space and clerical help for handling and distributing such information. It will edit the tangible effects with worldly efficiency and serve as a fountainhead of zeal for all who will participate.

(2) The publicity and recruitment committee, under its chairman John Redjinski, is the mobile unit via the U.S. mails. Its state representatives will be provided with irresistible materials. Instructions and suggestions will multiply as the months go on. The chairman has sound enthusiasm and effective know-how; let him channel it through you.

(3) *You* are the busy occupational therapists with the problems of shortages really at hand. You are the former occupational therapists, now busy with your own families. You are the most effective publicity material available. You like the work; you know its personal gratifications. Say so. Let your enthusiasm be felt by new recruits. It is infectious and prints its own story. See your local recruitment chairman.

(4) The schools; they are in business! They can lend their established services and use a brace of new ideas to good advantage. The current students tell their own story eloquently. Let them have an opportunity.

Present facilities can accommodate more students. However, good screening of applicants will continue. The need is not for more bodies but for more good occupational therapists. Keep the applicants coming in increasing numbers. There are fine young people who would resent not knowing about occupational therapy.

There we have it—a program that can be truly effective if all occupational therapists spread the word of need and opportunity across the nation. There are today capable people in their forties who say "If I had only known . . ." Don't let this happen to our young generation. We need them too badly—and they need a life's work. Beat the bushes with dignified effectiveness. The American Occupational Therapy Association is organized to help your efforts. We have something truly realistic to sell; it is a career of service that can make life more meaningful to the recipients as well as to the participants. Life needs to have a meaning in accomplishment and service to others.

Henrietta McNary, O.T.R.,
President.

From the Executive Director

I have missed the opportunity of speaking to you in the past two issues of A.J.O.T. having signed over the space to the World Federation for Occupational Therapists and the business and committee reports of the 1952 conference. I am glad to pick up where we left off back in October. This month I would like to give you a summary of several significant meetings we have attended and surveys in which we have participated. These have been indicative of the increasing trend of interprofessional cooperation and joint approach on common problems and goals. Pooling of effort of comparable groups in the health field instead of working independently, and at times, in direct competition to one another is a heartening note and holds strong potential for better understanding and strengthening of our forces.

I would like to give you the highlights and sidelights of meetings of the National Rehabilitation Association, the A.M.A. Congress on Medical Education and Licensure, and the surveys conducted by the President's Commission on Health Needs of the Nation, and the National Foundation for Infantile Paralysis on Personnel Needs.

The 1952 *annual conference of the National Rehabilitation Association,* Louisville, was attended by some 500 persons connected with federal, state and voluntary rehabilitation programs including vocational rehabilitation counselors, doctors and therapists. The theme, "Community Planning for the Rehabilitation of the Handicapped" was followed through in the three general sessions dealing with the philosophy, the principles and the techniques, respectively. Much of this material related closely to our own practices and was concerned with practical premises such as determining specific needs before setting up programs, coordina-

tion necessary after setting up, well-defined activities program to meet the need around which originally planned and necessity of giving the medical, hospital and civic groups information and interpretation in order to gain their cooperation. Personal and imaginative elements must be present.

Of particular interest were special sessions focused on multiple sclerosis, tuberculosis, cardiac conditions and the blind. Presentation of an evaluation program of the tuberculous included the findings following an appraisal of a state T.B. program which had been initiated at the request of our own Dr. Sidney Licht, and a five-year follow-up study of 260 patients on a T.B. cardiac service based on physical and psychological condition, earnings, vocational and socio-economic status.

Considerable time was devoted to a discussion of the professional problems of the vocational counselor which was centered around curricular requirements. It was pointed out that qualifications and specific requirements of other well defined disciplines had resulted in educational standards and that the field of vocational counseling with the handicapped had reached a level of similar need. Miscellaneous university courses, workshops and in-service offerings were urged to continue and it was indicated that scholarships would be needed. It was recommended that the National Rehabilitation Association should take the responsibility of investigating the organization of professional programs in vocational rehabilitation at the university level and that a national committee should be appointed to do this. Further discussion keynoted the fact that this group feel fundamental action is needed in determining the functions and skills of guidance personnel in rehabilitation and that this should be translated into terms of educational programs.

The Forty-Ninth Annual Congress on Medical Education and Licensure

This meeting in Chicago represented a kaleidoscopic picture of the problems and triumphs within the medical profession relating to their national and state medical boards, methods of examination and licensing, developments in medical education and teaching methods, etc. Much of this can be closely identified with the comparable problems and triumphs within our own profession and to me it was an encouraging comparison. We can well take pride in the manner in which we have developed, administered and maintained our selection of students (SSI), educational and teaching programs, registration, international reciprocity, etc. Of course our smaller numbers, as compared to medicine, appear to ease the complexity of working out some of these issues, but we do appear to be holding our own in recognition and soundness of approach. Granted we still have much to achieve and should constantly evaluate our status and standards.

The ensuing sketch gives you a cross-section of the sessions which Miss McNary and I attended. Examine these points in the light of our professional development. How do we measure up?

(a) *Medical education.* Experimentation in medical education began in 1904 when the A.M.A. Council on Medical Education was established and annual conferences were declared for free discussion of current problems and reports on methods of teaching. Sub-standard schools with limited regional recognition continued until recently. Today there are no unapproved medical schools. The trend to eliminate detailed rigidity in curricula and encouragement of schools to develop their programs within adequate standards has meant extensive planning for basic science courses, medical sciences, laboratory and clinical facilities, and closer integration of the undergraduate program. It was emphasized that problems of a crowded curriculum and pressures of new subject matter must not be allowed to deteriorate standards. The curriculum was referred to as the race course around which the student runs. An interesting experiment in medical education was described at Western Reserve University (under a grant from the Commonwealth Fund) intended to avoid this "cook book" type of education. The objectives of its curriculum were outlined: (1) to attain basic skills and knowledge, (2) to develop proper attitudes, (3) to develop habits of self-education. The latter includes introduction to medical literature, project studies and free time to pursue own interests on own initiative. This individualized type of education is spelling the necessity of acquiring increasing numbers of competent teachers, clinical clerkships and preceptorships, and presenting budgetary problems. One hundred and eight million dollars was spent on medical education in 1952 of which 60% came from federal funds.

A 31% drop in total number of applicants to medical schools (1949-1952) was announced. Barriers were described as: (1) educational preparation—quality inadequate, (2) finances—tuition and living costs, (3) limited capacity of schools, (4) geographical restrictions.

(b) *Methods of examination by national and state medical boards.* For the first time, the objective type of examination (multiple choice) is being used and interesting discussion was presented although a divergence of opinion was noted between the National Board of Medical Examiners and several state boards relative to personnel involved in the construction and administration of the examination. One form of examination being used includes 600 items in a two day examination

period as compared to 110 questions (essay type) previously written in two and one half days. You are familiar with our A.O.T.A. registration examination (first objective type administered in 1947) comprising 300 items given in a one day period.

(c) *Other groups.* These pertained to considerations and problems related to: (1) Foreign doctors—fifteen to twenty per cent (3500) of the residencies in U.S. hospitals today are foreign medical students. (2) Osteopaths—it is recognized that the practice of osteopathy has continuously been drawing nearer to scientific medicine and that the time has come to work toward integration with this group. It was proposed that the inspection and grading of schools of osteopathy should be conducted by the A.M.A. and that the teaching abilities of the approved medical schools should be opened to these schools.

The President's Commission on the Health Needs of the Nation

You are not unfamiliar with this vast and comprehensive undertaking as the press has carried material during the year in which the Commission has been at work, and my annual report to you included mention of it. The President created the Commission to "make a critical study of our health requirements, immediate and long-term, and to recommend courses of action to meet these needs, and recommendations. In the second phase —inventory of health resources, estimate of health needs, and recommendation. In the second phase on health needs, the Commission delineated several areas including child health, health of the aging, rehabilitation, training of physicians and medical associates, research. To enable the Commission to properly judge the issues in these fields, a series of one-day panels were set up in health fields with the most critical need. These panel meetings were designed to get as much open democratic discussion as possible with the participants presenting their points of view, thus obtaining the broadest range of experience, knowledge and opinion.

The panel on training of paramedical personnel was the one on which I represented occupational therapy. The presentation was made from a carefully prepared seventeen page documented statement, accompanied by reference materials and literature exhibits, which outlined the status of our profession in all of its aspects including needs and inadequacies (copies are available in the National Office and were distributed to members of the House of Delegates and education committee at the Milwaukee conference). Among the other fields represented on the panel were public health, health education, physical therapy, medical social work, medical record librarians, dietetics, pharmacy, hospital administration, X-ray technicians. No definite measures were accomplished during the session but reiteration of needs common to all of the paramedical groups gave emphasis which will be valuable to all of us in the near future and these were: training, post-graduate education, recruitment, finances.

A few facts and figures coming out of the study may interest you. Did you know that the paramedical group numbered 60% of all professional and technical health employees? Increased by 13% since 1947 when it totalled 19,180 persons? 9% of the available jobs for paramedical health were vacant?

The final report of the Commission will be published during 1953 in five volumes, "Building America's Health," the first one of which is now available, *Findings and Recommendations,* as announced in the February Newsletter. The detailed presentation of occupational therapy will appear in Volume II entitled, "Needs and Resources."

Survey on Personnel Shortages by National Foundation for Infantile Paralysis

During the past year the National Foundation has called together representatives of governmental and voluntary agencies to participate in meetings to consider the acute personnel shortages in medical social work, physical therapy and occupational therapy. The groups have represented the "consumers" of trained personnel and include Military Services, Veterans Administration, Federal Offices of Vocational Rehabilitation and Public Health, National Society for Crippled Children and Adults, National Tuberculosis Association, United Cerebral Palsy, National Multiple Sclerosis, etcetera. The objectives of the series of meetings have focused on: (1) What contribution to the solution of shortages can be made by these agencies in the areas of recruitment, scholarships and financial aid to schools. (2) How can the activities of these agencies be coordinated in the attack on these shortage problems.

Presentation on behalf of each of the three fields has been made based on materials compiled by a "three man sub-committee" containing facts and figures related to each field. Your National Office has worked closely with the committee and a portion of these results is the documented statement of occupational therapy to which I have referred in the President's Commission report.

In September a questionnaire was prepared and circulated to schools of occupational therapy, physical therapy and medical social work, designed to secure information on the possible expansion of their training facilities including size and maximum capacity of school, staff needs, space needs, clinical training needs, costs per student, etcetera. Compilation of revealing and valuable information has resulted due to the 100% cooperation of our 25 schools to whom commendation is due.

The final conference of the governmental and voluntary agencies resulted in a better understanding of the problems which must be solved if a constructive program is to be developed. A small committee will continue to discuss with the National Health Council the possibility of coordination of effort through an office associated with that agency. Realizing that this process will take time, and that the immediate program of student recruitment for the coming year is a serious one, the National Foundation has made a grant to each of the three professional fields. The grant to the American Occupational Therapy Association has been announced in the preceding column by our president, Miss McNary.

Marjorie Fish, O.T.R.,
Executive Director.

From the Educational Secretary

A new procedure is being instituted relative to the registration examination. Heretofore the schools have received the rating of each student and in turn were responsible for notifying said student. This will continue but it will be supplemented by the publication in the American Journal of Occupational Therapy.

This column will list the June examinees in the November-December issue and the February group in the July-August publication. The time discrepancy is unavoidable. First, some students finish clinical training one month following the examination date, the second delay is due to the mechanics of publishing.

As the registration examination is a certifying rather than a competitive examination, with one exception no ratings will be included. The exception is that the five top scorers will have an asterisk after their names to indicate "with honors". The list will be in alphabetical order with the code number of the occupational therapy school following each name. The code key will be located at the end of the list of examinees.

The following is the list of names as they were entered for the June, 1952, examination computation. Many have since married, we realize, but we are unable to keep abreast of the rapid changes.

Ackerman, Barbara S., 9
Alden, Priscilla M., 1
Angelocci, Joyce H., 6
Applen, Mary Mitchell, 9
Aschinger, Ingnd, 4
Austin, Helen J., 22
Auty, Virginia, 1
Bailey, Marjorie Ann, 8
Bailey, Mead M., 4
Barr, Virginia May, 20
Barthelemy, Geraldine M., 17
Batchelder, Jessica A., 11
Bauer, I. Elizabeth, 1
Baumgardner, Hannah R., 23
Beckler, Dorothy Swift, 1
Beltz, Minnie Marie, 8
Benjamin, Ruby Grace, 9
Benson, Valborg M., 8
Bergner, Zivia, 200, 2
Berry, Earl H., 26
Besbris, Beatrice, 1
Betts, Helen, 12
Bing, Robert K., 3
Bird, Bonnie Jean, 1
Blackburn, Allean, 24
Blake, Virginia J., 14
Blotner, Suzanne Berman, 8
Bowles, Jr., George A. Mrs., 16
Boyd, Jean Sheriff, 24
Braddon, Shirley, 6
Brady, Mary A., 2
Broaddus, Ann Garrett, 16
Brownrigg, Carolyn N., 11
Bryant, Mary E., 16
Buschart, Martha Jean, 22
Canada, Marjorie, 1
Carleton, Phyllis Elizabeth, 120
Carlson, Donna Jean, 9
Carlson, Marilyn L., 9
Carroll, Suzanne M., 8
Carson, Eilena Dorothy, 15
Christrup, Helen J., 22
Cinader, Alice, 22
Claflin, Anne, 7
Clark, Elaine Barbara, 16
Clarke, Dorothy Mary, 8
Cloclasure, Inez, 4
Condon, Joan P., 18
Cook, Donna M. Johnstone, 9
Cotter, Jean M., 8
Cousins, Ida Joan, 16
Cox, Leona Webber, 1
Cramer, Helen, 8
Crawford, Ann Carol, 13
Crawford, Joan, 1
Crowe, Thomas J., 24
Cusato, Jeanne M., 1
Daniewicz, Catherine V., 17
Davidson, Edythe, 13
Davis, Sarah Ann, 19
Debelak, Mary Ellen, 8
DeLong, Barbara S., 14
Dexter, Mildred L., 1
Dietl, Marilyn J., 9
Downs, Margaret S.,* 14
Draper, Marjorie E. O., 220
Dray, Gertrude Ellis, 120
Durand, Edra, 8
Durning, Stella A., 24
Ey, Mildred C., 6
Fairneny, June M., 1
Fakler, Marilyn Ruth, 9
Farquhar, Jessie, 8
Faulks, Aileen Boyd, 8
Ferris, Elizabeth Anne, 2
Fetterly, Margaret Ann, 6
Finn, P. Dorcas,* 15
Fisher, Milton J., 15
Fogelsonger, Jane E., 16
Frahm, Eugenia, 8
Fredman, Shirley, 22
Free, Adele Blaine, 13
Freire, Aida A., 12
Fuchs, Ernest Martin, 12
Gary, Virginia C., 1
German, Irene B., 15
Geymann, Barbara B., 19
Giese, Naomi E., 16
Gonzalez, Carlos Felipe, 1
Gordon, Virginia Lou, 18
Goucher, Lillian Virginia, 13
Graff, Dorothy M., 9
Graham, Clara E., 18
Green, Lillian R., 14
Gregg, Nancy J., 9
Griffin, Winifred C., 14
Groleski, Gloria M., 8
Grover, Philippa Eby, 1
Guiles, Dolores Maxine, 9
Gustafson, Carl R., 19
Haines, Joanne, 14
Hake, Carol Shuttleworth, 25
Hall, Anna Lou, 22
Hall, Erma E., 19
Hamilton, Grace A., 16
Hansen, Sigrid, 12
Harenburg, Ellen Lydia, 8
Harlow, Elizabeth Ann, 11
Haymes, Mary Joan, 14
Hermann, Shirlee E., 23
Hett, Gaylord C., 23
Hines, Garnet, 20
Hoffman, Eugene E., 14
Hoskins, Janet Elizabeth, 9
Hurtig, Bernadine L., 8
Ireland, Karl L., 13
Isaacson, Joan Irene, 120
Jacobson, Bernice Mary, 8
Jaffee, Edna Lelia, 2
Jantzen, Alice C., 1
Jaron, Frank Raymond, 14
Johnson, Barbara Lee, 16
Johnson, Donna Mae, 9
Johnson, Mary Frances, 16
Johnson, Suzanne Stone, 1
Jones, Eiluned J., 14
Kahn, Judith M., 1
Kantzer, Charles W., 19
Keck, Lou Ann, 18
Keller, Mary J., 18
Kievit, Anna Marie, 16
Kiggins, Joan Elaine, 13
King, Jane Kay, 9
Kinkema, Janet, 8
Kirchman, Margaret, 6
Knight, Phyllis A., 18
Koch, Mary Anne, 5
Kriner, Donna M., 14
Kurstin, Marilyn Estelle, 22
Landa, Helen, 14
Lane, Paula Ann, 10
Law-King, Irene D., 14
Lazarow, Sylvia A., 22
Lebow, Grace Hackel, 1
Ledford, Maryee Kay W., 16
Lippold, Judith R., 23
Lynn, Patricia, 8
MacDonald, Janet A., 6
Macenthum, Dorothea H., 22
Magney, Jean Miller,* 9
Main, Mary Jane, 18
Maram, Cora G., 14
Mason, James H., 16
Mazer, June L., 14
McCabe, Betty Rowley, 4
McCauley, Richard J., 9
McConahey, Florence H.,* 9
McNary, Joanne Plimpton, 1
Meyer, Margaret Mae, 6

* *Completed With Honors*

CODE NUMBERS FOR OCCUPATIONAL THERAPY SCHOOLS

FOREIGN SCHOOLS OF OCCUPATIONAL THERAPY

Martha E. Matthews, O.T.R.
Educational Secretary.

EDITORIAL

PROFESSIONAL READING

In this age of specialization our efforts are concentrated on the research needed in the field of occupational therapy. We want to make our treatment more specific and definitive. Because of our limited treatment groups, we have to evolve study groups in various hospitals that can pool their studies to make the findings authentic enough to warrant conclusions. This is necessary for the growth of the profession.

But while concentrating our studies to our specific fields, let us not forget to remain versatile and well informed. The need for research demands more application and study in each treatment area but each area so overlaps that the results found in one area can be well applied in another. Therefore let us keep our interests broad and learn all we can of every undertaking, every study, every variation of treatment program.

This can be done by reading the American Journal of Occupational Therapy for every issue is a projection of the current ideas of active, practicing occupational therapists. The complete reading of every Journal article is a quick effective way of keeping specialists generally informed. It is an easy method all too seldom used.

Occupational therapists look over the table of contents to see which of their friends has written anything or which article is in their field. Then too often the magazine is laid aside in the hopes of reading more in the future. Occupational therapists rationalize this action by saying "I'm saving

(*Continued on page* 81)

PEOPLE YOU SHOULD KNOW

LUCILE LAND LACY, O.T.R.
General Conference Chairman

Some of us get our state loyalties, like our religious and political beliefs, from the accident of our births; others make a choice in the matter, which may or may not coincide with the original plan; Lucile Lacy claims both the inheritance and the choice of Texas as her home state. Result: another highly legitimate Texas brag, because the Texas occupational therapists are justifiably proud of Lucile Lacy.

She graduated from Mary Hardin Baylor College, where she had majors in both art and mathematics, was a student assistant in art and received an award for being the outstanding art student in college. Following further study in Chicago, Lucile returned to the college of her graduation as an instructor in art. More post-graduate study then took her to New York for a year at Columbia University and a year at the New York School of Interior Decoration, the latter on a scholarship. In 1942, she received her Master's Degree in Art from Columbia University, having served during her part-time study years as assistant to the art director at Columbia.

Again Lucile returned to Mary Hardin Baylor College where she later became director of the art department. Her deep and sincere interest in people and her love of working with them made her a favorite with the students and a "senior sponsor" year after year. For Lucile, art has never been just an idea, an image or an interpretation to be transferred to paper. Rather, she has always taught and practiced art in its application to use in the home and to all forms of everyday living. This reflects even greater credit when one realizes that she has achieved considerable recognition from the exhibition of many paintings and other art forms in the Ney Museum (in Austin), the Southern States Art League, the Texas General Show, the Provincetown Art Show, the Texas Centennial Show, the Print Maker's Circuit and the National Academy of Design.

Lucile's approach to occupational therapy was through the rehabilitation work of Floyd H. Lacy, whom she met in her graduate study years in New York. Floyd had just graduated from the University of Virginia and was working in New York. Back in Texas, five years later, they were married. In 1940, in Washington, New York and Canada, Floyd participated in an exchange program between the United States Office of Education and the Canadian National Institute to study the blind rehabilitation program in Canada. Then, in 1941 and 1942, he worked for the Texas State Vocational Rehabilitation Commission for the Blind, and—according to Lucile, who was then back at Mary Hardin Baylor—Floyd was becoming a Texan, and F.F. V. (fast-fading Virginian). With the outbreak of World War II, Floyd went to Washington in connection with the adjustment and training programs for blinded veterans. Becoming more and more interested in rehabilitation, Lucile soon enrolled in the first war emergency course at the Philadelphia School of Occupational Therapy. On completion of her training, she was assigned to Avon Old Farms, the Army's convalescent and training center for the blind, where she and Floyd both worked until Avon closed in 1947.

Back to Texas once more, and in 1947, Lucile took the position of chief occupational therapist at McCloskey General Hospital in Temple. She was there until 1949 when she transferred to the V.A. Hospital in Houston as assistant chief of occupational therapy, being promoted to the position of chief therapist in 1951. Mr. Lacy's present position is that of vocational placement coordinator for the handicapped for Baylor University's College of Medicine in Houston.

The Lacy's live in a charming new house of Lucile's design, in an outlying section of Houston. All of the decorative and many of the functional aspects of their home are Lucile's touches. She enjoys cooking and is noted for her specialty of batterbread and apples. Both she and Floyd like flowers and yard work, a fact which is proved by the beautifully landscaped and well-kept gardens which surround their home.

Lucile Lacy combines the rare qualities of the true artist with exceptional supervisory ability and skill of administration. She thinks and works quickly but, in matters affecting others, takes action only after considered discussion with her associates. Her training as an art and mathematics major, with emphasis on teaching, serve her well in occupational therapy. Her broad interests and active affiliations bring a wealth of valuable information and help to her professional work. She is a member of Alpha Chi and Kappa Pi (scholarship and art fraternities), a charter member of the Print Maker's Guild, member of the Texas Fine Arts Association, Texas and American Occupational Therapy Associations, the Texas Society for Crippled Children and Texas Society for Mental Health. She is a past president of the Associated Art Instructors of Texas and of the Texas Occupational Therapy Association.

These and many other talents and abilities Lucile brings to the tremendous job of general chairman for A.O.T.A.'s 1953 conference. With her capable and conscientious hands in charge, an excellent meeting is assured for all who can attend.

MARY BRITTON, O.T.R.

Program Chairman

Back when ex-A.O.T.A. president Mrs. Kahmann was just Winifred Conrick and developing her department at Riley Hospital in Indianapolis, a brand new occupational therapist by the name of Mary Britton took her first job at Riley. In the intervening years, Mary has held a great number and variety of positions which make her one of the most widely experienced members of our profession, and a person who is admirably qualified for the duties of program chairman for the 1953 A.O.T.A. conference.

Although she was born in Shreveport, Louisiana, Mary also spent some of her earliest years in Texas and Arkansas. Her father was a railroad man, which may explain what Mary calls those "rabbit's feet" that keep her moving on, and may also account for her preference for trains to any other means of travel. The early years notwithstanding, those who know Mary usually think of her as a Missourian because of her educational and experience background in that adopted state.

Following graduation from Mary Institute in St. Louis, Mary went on to the St. Louis School of Occupational Therapy (now a part of Washington University) and graduated in 1929. It was then that she joined the Riley staff and embarked on her occupational therapy career. A brief detour from the strictly professional found her, with two friends, operating a knitting and gift shop in Webster Groves, Missouri, from 1932-1937. But she returned to the field with two part-time jobs in St. Louis: at the Curative Workshop, and with private cerebral palsied patients. From 1940-1944, she was director of occupational therapy at St. Vincent's Sanitarium, also in St. Louis.

Mary Britton, O.T.R.

Answering the call of her first O.T. chief, who was then in the Surgeon General's Office recruiting for the Army, Mary became chief occupational therapist at one of the military's largest (6000 beds) hospitals Kennedy General in Memphis, Tennessee. Here, she was in charge of five O.T. clinics: neuropsychiatric; general, including open ward N.P. and functional patients; paraplegic; chest surgery; and pre-vocational. Over 100 clinical affiliates from the Army's War Emergency Course trained at Kennedy under Mary's direction between 1944 and 1946. Her Army career ended with a brief tour of duty at the Regional Hospital in Fort McClellan, Alabama.

Along with approximately 500 other ex-Army O.T.'s, Mary next affiliated with the Veteran's Administration and, from 1946 to 1949, served as chief of occupational therapy in the V.A.'s Branch Office in Dallas, traveling over Texas, Louisiana and Mississippi as her "territory." From 1949 to 1951, she was chief occupational therapist at the Veteran's Administration Hospital in Houston.

Mary's present job is another indication of her broad professional abilities. She is currently associated with Baylor University's College of Medicine and is starting two occupational therapy programs, each on a part-time basis: one for neuropsychiatric patients at the Jefferson Davis Hospital, and one for physical disabilities at the newly established Institute of Restorative Medicine—both in Houston.

It goes without saying that Mary has been a member of the occupational therapy associations of Indiana, Missouri and Texas, but it should also be noted that she has served as an officer of all three; in fact, she was president of the Missouri group when they were hosts to the A.O.T.A., just as she is now in Texas. She has also been on the board of the T.O.T.A. since 1947. Her other professional memberships in the state include the Texas Society for Crippled Children and the Texas Society for Mental Health. Nationally in O.T., Mary is a division editor of A.J.O.T., and was for several years a member of the permanent conference committee.

Mary's extra-curricular activities includes a charter membership in the Bethany Methodist

Church in which she did the youth work for a number of years. She says she has no hobbies because she dislikes "doing the same thing over and over." She has "tried everything," but finds her greatest enjoyment in getting other people to do things. We agree with Mary that this is one very good reason why she likes occupational therapy.

In her own words, "I have some good habits that keep me healthy and a lot of bad ones that keep me happy!" Better come to the 1953 conference and get to know Texas' Mary Britton.

FANNY B. VANDERKOOI, O.T.R.
Institute Chairman

As director of the occupational therapy department at Texas State College for Women, Mrs. Vanderkooi is well-known in the Southwest as the "driving force" behind the expansion of the profession in this area. She came to the campus in the fall of 1944 to establish the occupational therapy course under the art department. From the beginning, when there were only twenty-three students, the department has grown until there are seventy-five graduates and seventy-five students now enrolled. Under her leadership, occupational therapy has become a separate department and is ever growing and expanding to meet the need in the Southwest.

Although she was born in California, Mrs. Vanderkooi claims Texas as her home. Since her father was a Baptist minister and had many churches throughout Texas, she and her five brothers learned early the value of cooperation and adjustment to changing situations.

Mrs. Vanderkooi received her B.S. in Art from Texas State College for Women, following which she taught school in a small West Texas town for several years. She did graduate work at the New York School of Ceramics at Alfred, New York, and at the Art Student's League of New York. At this time, the demand for occupational therapists became great and she decided to enter this new field. She received her professional training at Johns Hopkins Hospital and had her early working experience as a staff therapist at the Henry Phipps Clinic of Johns Hopkins Hospital, and as a supervising therapist at Walter Reed Hospital following World War I.

During this time, she met David Vanderkooi, and in 1924 they were married. She retired from the active field of occupational therapy to raise three children and to travel from Florida to California with her family. She was left a widow after seven years of married life. In any conversation about herself, Mrs. Vanderkooi adroitly changes it to one concerning Helen, or David, who is a cellist with the Rochester Philharmonic Orchestra, or Francis' children and her minister husband. When the children were small, the family developed a strong interest in music and had frequent spontaneous concerts. These continue now whenever they are all together. Another family favorite has always been camping trips. When the children were small, Mrs. Vanderkooi had a bookbinding shop and taught classes in her home in order to maintain the family solidarity. She was also a craft teacher in the recreation department in Pasadena, California and Houston, Texas.

Having a desire for further education, Mrs. Vanderkooi enrolled at the University of Southern California and received her Master's Degree in Fine Arts in 1940. She then worked as a staff occupational therapist at Stockton State Hospital in California for two years.

The urge to return to Texas and her desire to expand the use of occupational therapy led to the development of her present job. To assist her in establishing the occupational therapy department, Mrs. Vanderkooi took a refresher course at the Philadelphia School of Occupational Therapy in the summer of 1944, and visited many of the other schools for advice during this time.

Feeling the need for closer contact with the hospital departments, Mrs. V. (as she is affectionately called by her "girls") has worked for several summers, when she is not visiting clinical training centers throughout the country. During 1946 and 1947, she assisted with the reorganization of the occupational therapy department at Waco Veterans Administration Hospital. During the summer of 1948, she was a recreation worker with children of displaced persons at Mittenwald, Germany, U.S. Zone, under the American Friends Service Committee.

She is a member of the executive committee of the Texas Society for Mental Health and the Texas Occupational Therapy Association, representing the latter organization in the Texas Council for Mental Health. She is chairman of the institute committee for the 1953 conference of the American Occupational Therapy Association.

Mrs. Vanderkooi's consuming interest in the field of occupational therapy is only surpassed by her pride in her greatest accomplishment—that of raising her children. Her many interests all center around the need for integration of team work whether it be a camping trip, family concert, a classroom project in marionettes or rehabilitation. It is a joy to be with her to receive some of her contagious enthusiasm for whatever project may be at hand.

FEATURED O.T. DEPARTMENTS

OCCUPATIONAL THERAPY
HERMANN HOSPITAL
Houston, Texas
Virginia Brashear Oser, O.T.R.

Who hasn't dreamed of an occupational therapy clinic included in the original plans of a hospital instead of some makeshift arrangement two miles from physical therapy? In Hermann Hospital this is a reality. You enter the physical medicine department through a waiting room which is tastefully furnished in keeping with the rest of this beautiful modern structure. To the left is the Hermann School of Physical Therapy; to the right is the treatment area composed of physical therapy, occupational therapy and the physiatrist's offices.

The physical medicine department had some of the usual growing pains during its development. It was organized in the old Hermann Hospital when Dr. Oscar O. Selke, Jr., the physiatrist, affiliated there in 1946. Occupational therapy was added in October, 1948, when Gladys Irene Greer joined the staff. She is now assisted by a staff therapist and two non-professional aides.

Hermann is a general hospital, and the second floor location of the physical medicine department is convenient to in-patients and out-patients alike. Though, as has been stated, the clinic was designed principally for the treatment of physically disabled persons, in selected cases, tonic and psychiatric patients are accepted.

Patients are referred by physicians, the Hermann Hospital Clinic, and the State Vocational Rehabilitation office. The diagnoses are as varied as the causes of physical disabilities—arthritis, polio, cerebral vascular accidents, fractures, industrial accidents, to mention a few. Cerebral palsied children are cared for by the Harris County Cerebral Palsy Treatment Center or the Arabia Temple Crippled Children's Clinic, but teen-aged cerebral palsies are referred to Hermann occasionally for the furthering of special skills and for pre-vocational exploration.

Each case, child or adult, is examined by Dr. Selke and physical therapy, occupational therapy or both are prescribed as needed. These patients may be treated on an in or out-patient basis and their individually scheduled treatments which may vary from twice a day to several times a week with the duration from 20 minutes to four or five hours are planned as far as possible at their convenience. Written progress reports are sent periodically to the referring doctors. Frequently the doctors visit the clinic during their hospital rounds to discuss with the therapists their patient's progress, to observe the patient during treatment or to adjust treatment as indicated.

Fees are charged for each treatment and are based on the time involved and the attention required by the patient. The charge is for "Physical Medicine", whether it be physical or occupational therapy or both, and no additional charge is made for the materials used in occupational therapy. Any articles made during the treatment program may be kept by the patient.

Equipment in the clinic has been carefully selected to achieve exercise possibilities for all joints and every gradation of weakness. In a visit to the clinic a man with a back injury was observed working on the treadle printing press for strength and endurance, balance and eye-hand-foot coordination needed in his job. A chronic polio aged eight, with head, back and double long leg braces srood at the work bench for balance and standing tolerance as she sanded a picture frame to increase the strength of her arms. The frame will go on a painting she did to increase her finger dexterity.

A woman who caught her hand in an icing machine at the bakery where she works, was rolling coils of Pyrocon to stretch the flexion and adduction contractures of her fingers. A young matron, who had respiratory and spinal polio this summer, was learning to get in and out of the suspension slings on her wheelchair. Another of the summer's polios was making a toy box for his young son. At the moment he was sanding the parts on an inclined plane to strengthen his weakened shoulders.

Working on the bicycle jig saw with the pedals adjusted to each knee's maximum range was an automobile accident case who had a femur fracture of one leg and a crushed patella of the other. The Latin-American, who spoke only a few words of English, was working on the floor loom with beater extension, stretching his own shoulder following exploratory surgery, and a post-polio child, six years old, with her arm in a suspension sling was finger painting to exercise the poor grade muscles of her shoulder and elbow.

As is true in any out-patient program, a home routine, in most cases, is a must for achieving optimum results from treatment. These routines are kept as simple as possible and a great deal of use is made of activities in and around the home that can be adapted to achieve the desired exercise. However, equipment and materials are sometimes sent home with the patient after he has been carefully instructed and checked on procedure.

The relationship between physical and occupational therapy in the correlation of treatments for

each patient in the clinic is very close, and is achieved primarily through conferences between the physiatrist, physical therapist and occupational therapist. The physical design of the department fosters an informal but highly effective method of coordination. The occupational therapist can easily observe the treatment a patient is receiving in physical therapy when this seems advantageous. When occupational therapy is added to the prescription of one who has been receiving physical therapy, it is the physical therapist who brings the patient to the occupational therapy clinic. While there the physical therapist observes his treatment and others as well. The growth of understanding and respect for the other service which this increased knowledge engenders is evident as therapists begin to recognize in patients they are treating the need for the other service. Very often it is the therapist who brings to the attention of the doctor the advantage of enlarging a patient's treatment program.

Twice a month there is a meeting of all the therapists with the physiatrist for the discussion of specific conditions and the techniques for treating them. For instance, Miss Greer said: "the discussion would not be that we use the mass reflex pattern in the rehabilitation of the lower extremity of a spastic hemiplegic, but the techniques of how, the specific way in which we can use these mass reflexes; not that we work to mobilize a frozen shoulder but how we can do it. Another time it may be a specific patient and his individual problems, or a new idea reported in some medical journal. Most important, is that it is a discussion—an interchange of information and ideas."

The Hermann School of Physical Therapy accepted its first class in October, 1947, and from the beginning the curriculum has included 18 to 30 hours of orientation and theory in the closely allied field of occupational therapy. The purpose of this course is to give the physical therapy students an orientation to the field of occupational therapy and an understanding of the principles and techniques of kinetic occupational therapy. To accomplish these aims, lectures and demonstrations are given on occupational therapy in the various fields. The discussions of kinetic occupational therapy are given after the students have completed their studies in therapeutic exercise. With this background, the interpretation of activity as a form of specific exercise is much more easily accomplished. Several hours of lab work within the occupational therapy clinic convince the students of the value of this type of exercise. They go out better able to recognize when a patient they are treating is ready for and needs occupational therapy —better able to work with and coordinate a treatment program with the other members of the rehabilitation team.

The outstanding feature of the treatment program in the Hermann Physical Medicine Clinic is the close teamwork and mutual respect and understanding of physical and occupational therapists. This is accomplished in part by the compactness of the physical plant. However, Dr. Selke's policies of having his therapists think together and Miss Greer's ability to demonstrate good occupational therapy have gone a long way to foster this condition.

PREVUES OF THE 1953 CONFERENCE

The 1953 *A.O.T.A. conference theme* has been chosen: "Refining Our Resources." Against a background of the oil wells that characterize so much of Texas, and in the city of Houston where refineries for conversion of natural resources into commercial products are so vital an industry, this theme—to the planning committees, at least—seems a logical choice. We're hoping that it will also make for a challenging and stimulating conference.

In keeping with national policy on plans for the general program, every effort has been made to include all of the major disability areas in which the occupational therapist works. Thus, those who are interested in psychiatry can expect to find at least one worthwhile session devoted to that topic, and, in addition, will have the opportunity of hearing about the present treatment of tuberculosis; research, plastic surgery and other treatment procedures for burns; latest trends in the care of the cerebral palsied; the functions and problems of a respiratory center; techniques for the epileptics; programs for geriatric patients; and other topics of interest to all in the medical welfare field. In short, the general program should have wide appeal and we hope it will help indicate new ways in which we may "refine" (change, improve, adapt) our "resources" (occupational therapy techniques for the disabled).

The *institute theme* was more a matter of heritage than of choice. Repeatedly over the past several years since inception of the institute plan, requests for an institute on research have reached the education office of the national association. This year seemed ripe for trying to meet that request, and plans for doing so have been in the making since before our last annual conference. We feel confident that the result will at least partially justify the efforts being expended by the institute committee.

A note about this word "research." It has an automatic though unfortunate ability to frighten many of us or at least to put on our guard. Understandable though this may be, it is at the same time regrettable, and all plans for the 1953 in-

stitute have been made with this factor foremost in mind. In other words, our aim will be to present the approach, methods, procedures and techniques that are essential to research and—*it will be basic material!* All of us are approaching this problem from the same vantage point and we hope to provide practical and realistic material which will be as basic and as essential to the problem as is the need that it be faced. We all realize that research is one of the developments to which occupational therapists have yet to make significant contributions. A study of eight occupational therapy research projects in the United States will make the program practical rather than theoretical. Read the following topics being considered for various sessions at the 1953 institute and see if you don't agree that attendance is a *must* for *you* and the future of research in occupational therapy:

"What is Re.earch"
"The Present Status of Research"
"Evaluation of Research Topics"
"Evaluation of Eight Research Projects in O.T."
"Organization of Research Reports"
"Techniques of Analysis and Interpretation of Data"
"Arranging and Pre.enting Materials"

The *schedule* for the annual conference is being experimentally changed for the 1953 meetings, and this change has particular and very important reference to the institute. In response to comments from past years concerning the length of the conference (eight days counting pre-conference meetings of committees and the two-day post-conference institute), continuing efforts have been made to shorten the total period while still retaining valuable content. Thus, for 1953, Association officials have approved the try-out of a new plan: Namely, holding the institute prior to the general sessions, and concurrently with some of the pre-conference meetings. The first session of the institute will, therefore, begin on Monday, November 16, and convene in three additional sessions on that day and the following morning. This overlap with usual pre-conference schedules will heavily penalize the Board of Management which, by constitutional provision, must meet on the day before and the day following the annual meeting, but the great majority of the membership will benefit through economy of time. *Advance registration will open on Sunday evening.* Be sure to remember those important changes and we hope it will facilitate your attendance.

Another completely new feature of the 1953 conference will be an art exhibit by occupational therapists. This idea has also been incorporated into the conference schedule by popular request. For this year at least, it will include only painting, drawing, sketching, lithographs, block prints, silk screen prints, and similar types of art (no crafts). It will also be limited to the art productions of occupational therapists and will not in any way be an exhibit of patients' work. Spread the word among your friends and get them to enter the fun. We think it will provide a new slant on and appreciation for many of our talented members.

Social events? Always! In Texas, these will include a get-acquainted tea for pre-conference and institute delegates, hostessed by the Texas O.T. Association; the annual banquet which is always an extra-curricular attraction; and a special Western-Style barbecue celebration for the Schools Round-Up. Better plan now to BE THERE so you can attend them all. Luxurious and not-too-expensive hotel accommodations await you, because Shamrock rooms are real conference specials. Even with four in a room, you'll still have the space that is Texas. And you'll love the act as well as the idea of swimming (in November) in the Shamrock's heated pool and sitting under the cabanas and palm trees in the patio.

See you in Houston in November '53!

Sincerely yours,
The Local Conference Committee.

Cerebral Palsy . . .

(*Continued from page* 59)

necessity confined to empirical technics—some of which have stood the test of time—some may need revision or elimination. We speak of reeducation or the learning of new muscle patterns. This seems a theoretical possibility in paralysis or weakness since it seems that all functions are accomplished by memories stored in some fashion in the cerebral cortex as engrams. The fact that speech can be relearned after an injury to the dominant hemisphere would indicate there is the possibility of some other part of the brain taking over, in this instance the opposite hemisphere. At the present moment it is beyond my poor powers of imagination to understand how relaxation and stability is brought about in those severely afflicted with abnormal movement and yet I know improvement does occur in this direction for which credit has been given to the determination, persistence, and faith of the therapist. The hemiplegic and the spastic without associated abnormal movement and with good intelligence offer the best prognosis; the ataxic and dystonic (and athetoid) the poorest, but since there are degrees of ataxia and abnormal movement many of these can be helped to independence.

Drugs at present play a minor role in therapy, except in the control of epilepsy, but we remain hopeful, looking for agents that will reduce spasticity or dampen abnormal movements. Help can be anticipated from the neurosurgeon in the future. Progress has been made in developing instruments

that can selectively interfere with nerve pathways in the brain-stem where we hope someday to hit the right spot to eliminate some of these distressing features of cerebral palsy.

Research . . .

(*Continued from page 61*)

forever. Substantiation of a good many past researches would aid immeasurably in widening current and future horizons.

It would be well to end this discussion of general principles of research with a comment on statistics and their use. Most people are overwhelmed by statistics as some mysterious force or as a devilish device which can be twisted to accomplish all sorts of ends. Neither view has any basis in reality; nor is it a perfunctory mechanical process of applying formulae and operating a calculating machine. The application of statistical measures to raw data requires good judgment, a critical attitude and careful thought.

ERRORS IN STATISTICS

The following are a few of the typical sources of error which have given rise to some misconceptions about statistics and their use. They can be summarized under three headings:

1. *Inadequate and inaccurate data* arising from insufficient data, unrepresentative samples or data deliberately falsified by those furnishing it. Such data may also be the result of poor observation and carelessness or the utilization of unreliable standards and units of measurement.

2. *Mechanical mistakes* such as mistakes in arithmetic, application of wrong formulae and errors in copying.

3. *Unsound interpretations* produced by failing to consider all the significant factors, ignoring negative evidence, comparing non-comparable data or generalizing from too few cases. Two of the greatest violations are those of mistaking correlation for causation and distorting interpretations to fit preconceptions and prejudices.

Cardiac Children . . .

(*Continued from page 67*)

cal and emotional tensions. Hence there is risk of interference with normal psychologic growth and development. In view of the possibility that certain of these children may have recurrence of rheumatic fever requiring further bed rest or may have to adjust to certain restrictions due to permanent cardiac damage, importance should be given to measures which prevent warping of the personality, which give opportunity for a healthy emotional development and which foster as positive an outlook as possible.

As part of the total physical and emotional care of such children a hospital program for recreational and occupational therapy can be of great benefit and value. It can help the child over the difficult adjustment period and favors a more relaxed attitude toward the illness itself and necessary treatment. Such a program offers a range of substitute activities whereby satisfactory outlets for tensions may be achieved. Types of activities are geared in the individual case to the degree of physical activity appropriate to the medical condition at a given period of time. These activities should not only provide outlets but also stimulate and meet the interests of growing children, hence advancing their scope of interest and supplementing academic education. Through group activities and measures which relate hospitalized children with community activities cooperative experience is encouraged and a sense of isolation prevented.

Evaluation of the ultimate effects and benefits of such a program reported in this paper will necessitate longer follow up. However, it is expected that the observed better psychological adjustment during hospitalization has helped to reduce damaging interference in the growth of the child's total personality. Thus better future adjustment of the individual child may be anticipated.

Geriatrics . . .

(*Continued from page 68*)

some degree of status and importance so that each can live in a large municipal home of this sort with some degree of dignity.

The occupational therapy and rehabilitation division of the City Home strives to motivate the guest to new interests and activities thereby helping the guest to release many of the tensions and anxieties—all of which makes for better adjustment to this mode of living. Where ever possible, (age being a potent factor), the guest is vocationally rehabilitated to return to the community as a self-sustaining member of society. The division consists of five craft shops where men and women spend some four hours each day discovering new interests and in learning new skills. All gain financially from the sale of craft articles. Guests take part in community exhibits and all enjoy companionship with other oldsters who have like interests.

Many older guests are not interested in the creative arts program. For these guests we have an industrial sewing shop where linens and clothes are repaired by hand. Many of these guests feel that they are repaying the City of New York somewhat for the custodial care, medical and nursing attention which they receive. Life for these folks becomes meaningful. They are useful and they once again function effectively. Approximately 300 other guests serve in the institutional

vocational placement units of the Home. Here, approximately four hours of service are given by these folks in either the dietary, housekeeping, clerical or roads and grounds divisions of the Home.

An early attempt is made to give the guest some degree of responsibility. He senses a feeling of being a part of the group and he welcomes the feeling of being useful. Attitudes are changed, tensions are released and emotional stress is eased. Invalid habits are thwarted and initiatives are developed. Feelings of defeatism and throughness are lessened. Opportunity for group cooperation and the sharing of responsibilities are made available; and equally as important, the guest finds companionship. A newspaper project, a garden club and numerous parties and treats add to the activities of the division. At all times each guest is treated as an individual and his program of activity is planned with his interests, dislikes, capabilities and his needs at heart.

If given an opportunity, older folks can prove that they have ability despite advanced years. This was proven more than adequately during our late war emergency. They served well.

In summation, then, let us not forget that people are people regardless of age—older people can and do learn new activities—they have much to live for if life remains meaningful to them. Best for old people are real jobs, real family relationships, and real functioning in society. We know that people are living longer. We as occupational therapists on a rehabilitation team must strive to make this longer life worth while.

Professional Reading . . .

(*Continued from page 73*)

my copies to read some day when I have time." "There is not an article in this issue that interests me." "I haven't time now." Excuses are easy to render but hard to justify.

The articles are worth reading and of value whatever the specialty discussed. And as for time, there is always time enough in a two months period to read the entire issue. It only takes three hours to read the entire magazine from cover to cover including the advertisements. A fast reader can peruse it in less. Only three hours every two months refutes any rationalization and the professional value is inestimable.

A.J.O.T. FEATURE

This issue of the American Journal of Occupational Therapy has been printed in two parts. The second part contains a listing of occupational therapy suppliers for your convenience and interesting articles on visual aids and adapted equipment compiled for ready reference.

DELEGATES DIVISION

ARKANSAS

Delegate Reporter, Virginia R. Stockwell, O.T.R.

The Arkansas O.T. Association had its beginning in October, 1951, when a group of therapists met in Little Rock to make plans for an association. Several were members of the Tennessee and Texas associations but the need was felt for a state association. At this time a committee was appointed to draft a constitution and by January, 1952, when the first regular meeting was held in Hot Springs at Army-Navy General Hospital, the first draft of the constitution was ready to be discussed and adopted by the group. The Tennessee Association was very helpful in suggestions for our constitution and we were further aided by previous experience of the committee in their work with the Oklahoma and Georgia Associations.

Officers were elected at this meeting.

President	Virginia R. Stockwell, O.T.R.
Vice President	Joan M. Kalb, O.T.R.
Secretary-Treasurer	Lt. Ruth Metcalfe, O.T.R.
Delegate	Virginia R. Stockwell, O.T.R.
Alt. Delegate	Lenore Klin, O.T.R.

Four regular meetings are held a year—January, May, September and November.

At the May, 1952, meeting the final draft of the constitution was adopted and submitted to the House of Delegates and the Arkansas O.T. Association became a part of the A.O.T.A. and its delegate was seated at the convention in Milwaukee. Dr. Barney Briggs, one of Little Rock's leading pediatricians spoke to the group on "O.T. in Pediatrics". He spoke of the need of guidance for volunteers in the children's ward at the University Hospital and a committee headed by Betty Sorenson and Margaret King was appointed to help in training such volunteers when the program was established.

In September the Arkansas O.T. and P.T. Associations held a joint meeting at Army-Navy Hospital with Lt. Col. Ritchey, chief of the orthopedic section speaking on "Contractures of the Hand".

The November meeting was held in Little Rock with Dr. Samuel B. Thompson speaking on "Cerebral Palsy".

Future plans include a meeting in February at the Ft. Roots V.A. Hospital in conjunction with the neuropsychiatric institute which is held annually at that hospital, with O.T.s from the surrounding states as our guests. In April the National Polio Foundation with the O.T., P.T. and state Nursing Associations as co-sponsors are sponsoring a Seminar on Polio to be held just prior to the meeting of the Arkansas Medical Society in Little Rock.

The Arkansas Association has at present a membership of 12 active members, and 4 Associate members. Attendance at the meetings average 12.

GEORGIA

Delegate Reporter, Irene Perkins, O.T.R.

The Georgia Occupational Therapy Association has held six meetings in the past year, with an average attendance of ten O.T.R.'s at each meeting. In our state, the G.O.T.A. and the Georgia chapter of the A.P.T.A. meet together for four meetings per year, with both groups responsible for planning the year's programs. These programs have been dinner meetings, with a speaker or panel of doctors discussing pertinent medical subjects. In the spring, Dr. Robert L. Bennett gave an excellent demonstration of splinting of the upper extremity, followed this fall by one on the splinting of the lower extremity and scoliosis. In March, the combined associations toured the state

mental institution at Millegeville, Georgia, and heard a panel of the staff doctors discuss the psychiatric program being used there. During the summer, the O.T.'s met for a progressive dinner with each course being served at a different O.T. unit in the city of Atlanta, including Emory University Hospital, the Cerebral Palsy School, Lawson Veterans Administration Hospital, and the Physical Medicine and Rehabilitation Clinic. Also at this meeting Miss Mary Rose Costello, director of the Junior League Speech School in Atlanta discussed speech therapy, especially with aphasics. In the future, the educational program within the association will include an exchange of craft techniques, adaptations, and other methods which each therapist has found useful.

OFFICERS

President	Martha Schnebly, O.T.R.
Vice-President	Mrs. Barbara Grant, O.T.R.
Secretary-Treasurer	Capt. Jean Crouser, O.T.R.
Delegates	Irene Perkins, O.T.R.
Alternate Delegate	Mrs. Eleanor Ring, O.T.R.

INDIANA

Delegate Reporter, Marian J. Kraker, O.T.R.

During the year 1952, the I.O.T.A. has held 5 regular meetings with an average attendance of 28. Our association consists of 30 active members.

The first meeting took place in February at the Riley O.T. Shop, I.U. Medical Center, Indianapolis and was a joint one with the Indiana physical therapists. A demonstration in occupational therapy was given by a young lad, a congenital amputee, who had the Krukenberg procedure done on his left arm and was fitted with a prosthesis on his right. He also had a prosthesis on his left leg. A movie "Improving Functional Capacity of Severely Involved Upper Extremities" (Warm Springs, Georgia) was shown.

In March we met at Flower Mission, T.B. unit of General Hospital, Indianapolis, and enjoyed a very worthwhile demonstration of stenciling, block printing, crayon and water color put on by The American Crayon Co. A display of decorated articles and an assortment of books added to the demonstration. A short business meeting followed.

In May, we held our Annual Meeting, a joint one with the physical therapists, at Camp Atterbury, Indiana. Colonel Howard Doan welcomed the members and guests, after which Lt. Col. Tillston gave a most interesting presentation of the occupational therapy and physical therapy treatment program on the orthopaedic Service at the U.S. Army Hospital at Camp Atterbury. Following open house in the O.T. and P.T. Depts., delicious refreshments were served.

September found the O.T.'s and P.T.'s enjoying a "pitch in" affair at the Sullivan Park Fish Hatchery, Indianapolis. This was followed by an informal discussion of legislative procedures that would be necessary for state licensing of P.T.'s.

During the beautiful fall weather in October we set our course for Louisville, Kentucky where we renewed acquaintances with the Kentucky O.T.'s. A luncheon at the Pendennis Club, complete with corsage, favors and welcoming speeches from both association presidents was highlighted further by field trips to the Mary Alice Hadley's Pottery Factory and to Lou Tate's "Little Loom House" which everyone found very interesting.

The Cerebral Palsy Clinic, Riley Hospital, was hostess for the November meeting. A business meeting and delegate's report of the National Convention held in Milwaukee was followed by two movies, "Metal Enameling" and "Pottery Decoration".

Recruitment was ever present in the plans of our association. Many individuals visited Riley Hospital and General Hospital during the year to see and study O.T. at first hand. Gilbert Forbes, news commentator, interviewed, on television, a panel on recruitment. This panel, Evelyn Marsh, Marian J. Kraker and Janice Bowden, student from Texas State College for Women answered questions about their work in occupational therapy. Muriel Raum, Chief O.T., V.A. Hospital, Marion, Indiana, spoke to a group of interested Marion high school students. Posters and brochures depicting O.T. were mailed to the larger schools in the state. The book, "Opportunities in O.T." by Marie Louise Franciscus, will be placed in the Indianapolis public library. Our new recruitment and publicity chairman is Miss Joanne Silhavy, O.T.R.

The legislative chairman is Marguerite E. Bick, O.T.R.

Since we could not sponsor a state scholarship fund, $50.00 was donated to the national scholarship fund.

OFFICERS

President	Miss Ruth Grummon, O.T.R.
Vice-President	Mrs. Rita Noel, O.T.R.
Secretary	Miss Virginia Sowers, O.T.R.
Treasurer	Miss Patricia Belton, O.T.R.
Delegate	Miss Marian J. Kraker, O.T.R.

MARYLAND

Delegate Reporter, Mrs. Eleanor Stisser Owen, O.T.R.

The M.O.T.A. has held seven meetings during the year 1951-1952, with an average attendance of 30. At this reporting, our association consists of 35 active members, including two honorary life members, and 25 associates.

Interesting and informative meetings covered the following:

1. *October*: Delegate's report of the A.O.T.A. conference in Portsmouth was presented at a dinner and business meeting. The M.O.T.A. voted to support the A.O.T.A. in its stand vs. state licensing of O.T.R.s. Miss Ruth Brunyate, O.T.R., was appointed state chairman of the legislative and civil service committee.

2. *December*: "The Importance of Child Development in O.T." presented by Frances F. Schwentker, M.D., Pediatrician-in-Chief, Johns Hopkins Hospital.

3. *February*: "The Nature of Psychological Healing", by Jacob H. Conn, M.D., Baltimore psychiatrist.

4. *April*: Annual business meeting and election of officers.

5. *June*: M.O.T.A. was hostess to the District of Columbia and the Virginia O.T. Associations at the fifth annual tri-state meeting. Miss Sallie T. Jones, O.T.R., chairman for this meeting, arranged a splendid program, as follows: "Psychodrama As An Aid to the Psychotherapist", presented by Albert Kurlland, M.D., Acting Medical Director, Spring Grove State Hospital, Catonsville, Md.; "The Psychiatric Team in Action", by Robert E. Bennett, M.D., Clinical Director, New Jersey State Hospital at Trenton; "Occupational Therapy with the Amputee Child", by Florence M. Stattel, O.T.R., Director of O.T. Kessler Institute; "Teaching by Television", by Lynn D. Poole, Director of Public Relations, Johns Hopkins University and producer of "The Johns Hopkins Science Review".

6. *October*: Dinner and business meeting. The delegate gave her report on the House of Delegates and the A.O.T.A. conference held in Milwaukee.

7. *December*: "Muscle Function in Cerebral Palsy", by Winthrop M. Phelps, M.D., Medical Director, Children's Rehabilitation Institute, Cockeysville, Md.

Various members of our association have talked on occupational therapy before civic groups; over TV and radio; in career conferences at high schools and colleges in the Baltimore area. As another facet of the recruitment

program, several O.T. departments have held "Open House" to groups of high school students.

The fund raising committee has been active under the chairmanship of Elizabeth Grayson, O.T.R. Members have contributed two hand-made articles and 4 smaller items for Christmas stocking fillers. The pre-Christmas sale netted the association over $200 in 1951. At this writing, the committee is busy with its 1952 sale.

M.O.T.A. had one great problem this year, when a group of unqualified persons announced the opening of an "Occupational Therapy Center". The executive committee of the M.O.T.A. reviewed the situation and, through tactful cooperation with those backing the venture, succeeded in eliminating the use of the name occupational therapy in favor of "Handicrafts Center".

Mrs. Marshall L. Price, O.T.R., has been appointed Honorary Life Member of the M.O.T.A. The appointment was made by another distinguished member of our association, Wm. Rush Dunton Jr., M.D. For her outstanding work in occupational therapy, Mrs. Price's name has again been entered in "Who's Who in the East".

Several of our members have been among the first to join the newly formed World Federation of Occupational Therapists.

The M.O.T.A. is looking forward to the 1954 A.O.T.A. conference in Washington; our association will then be co-hostesses with the District of Columbia and Virginia O.T. Association.

OFFICERS

President	Miss Ruth Hadra, O.T.R.
Vice-President	Mrs. Ruth Baldwin, O.T.R.
Secretary	Mrs. Elayne Gross, O.T.R.
Treasurer	Mrs. Martha Winfield, O.T.R.
Delegate	Mrs. Eleanor Stisser Owen, O.T.R.
Alternate Delegate	Mrs. Beatrice S. Ferguson, O.T.R.

PUERTO RICO

Delegate Reporter, Blanche P. de Coss, O.T.R.

During 1952, our second year of existence, the Puerto Rico Occupational Therapy Association held five ordinary and one extraordinary meeting at the Professional Building, Santurce. Our attendance averaged 8 active members and 2 associates, of our total of 16 active and 6 associate members, 4 of which have moved to the States, besides our president who is taking a post graduate course at New York University.

The extraordinary meeting was held at the Club Ponceno, a social club, on November 8th. Miss Rosa Elisa Jorge gave her report on the Milwaukee annual conference of the American Occupational Therapy Association. Mrs. Hazel Moreno addressed the group on the possibility of organizing a work-shop in crafts sponsored by the Payne and Smith Co., which she represents in Puerto Rico. This project will be discussed at the first meeting in 1953. The Federal Civil Defense material sent by our executive director was distributed among the members. A cocktail party followed and we all had the opportunity to chat a great deal as all the members were present in this extraordinary meeting.

We hope to present the Licensing Law for Occupational Therapists in Puerto Rico during the next meeting of Puertorrican Legislature. Our endeavor to raise Civil Service qualifications for occupational therapists in Puerto Rico has been an uphill fight. Nevertheless, Mr. Torres Braschi, Chief Personnel Officer of the Commonwealth of Puerto Rico, has promised us to study the qualifications and salary scale as proposed by our executive committee.

The publicity and recruitment committee has been active this year, giving talks to students of several of the high schools in the Island. The newspaper "El Mundo" (the most important diary in Puerto Rico) dedicated an editorial on July 22, 1952, on the value of occupational therapy in the rehabilitation of the veterans at San Patricio Veterans Hospital, and two feature articles with photos during the current year.

The year of 1952 brought us back Miss Carmen Pura Perez, the first Puertorrican to become a registered occupational therapist, with her Master's Degree. At her arrival, Miss Perez was appointed teacher of occupational therapy—in the new P.T. and O.T. school, organized by the State Insurance Fund and pending recognition of our American Occupational Therapy Association and the American Medical Association.

This year has also seen the organization of new occupational departments in several of our federal, insular and private Hospitals: Miss Margarita de Leon, O.T.R., is now in charge of the new occupational therapy section, at the Rodriquez General Hospital, U.S.A., at San Juan, Miss Aida Freire, O.T.R., opened the department of Fajardo District Hospital, and Miss Maria I. Ponton is in charge of the new occupational therapy department at the N.P.-T.B. Hospital in Hato Tejas, Bayamon. New departments were opened at Clinica Antillas and Fernandez Garcia, both T.B. hospitals, but due to the lack of registered therapists, these departments are staffed with industrial and home economics teachers. We hope that 1953 will bring sufficient registered therapists to staff all the available O.T. departments in Puerto Rico.

OFFICERS

President	Mr. Esteban Lopez, O.T.R.
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FIRST CONFERENCE ON REHABILITATION

Indianapolis, Indiana

June Sokolov, O.T.R.

The first nation-wide conference on rehabilitation centers, sponsored by the National Society for Crippled Children and Adults and the Office of Vocational Rehabilitation of the Federal Security Agency was held in Indianapolis, December 1-3, 1952.

Forty-four programs were represented in all. The assembly comprised physicians, therapists, vocational counselors, teachers and representatives from the two sponsoring agencies. Mr. Henry Redkey, of the Office of Vocational Rehabilitation, chairman, deserves special mention for his dynamic organization of a very ramified program.

Monday's theme was the identification of common problems and their referral into committees for the working out of solutions. Participants were divided into four working groups to explore four major areas: (1) Personnel Problems. (2) Professional and Community Relationships. (3) Integration of Services. (4) Exchange of Information and Future Planning.

On Tuesday morning experts were on hand to discuss the problems of professional education, psychosocial services and community relationships in the "search for answers" to the problems posed. Afternoon and evening (until far into the night) were devoted again to committee meetings. Once assigned to a committee (on an interest basis) each person remained with that group. I was a member of the panel on personnel problems. Among the topical considerations of this group were such problems as: comparison and standardization of personnel policies, recruitment and employment, department caseload standards, utilization of non-professional personnel, basic staffing patterns for centers, staff development (on-the-job training), job analysis, etcetera.

Wednesday's meetings revolved around the theme "what have we learned". Again, the morning session was devoted to presentation of selected subject matter by experts. Dr. Robert Neff, Superintendent of Methodist Hospital discussed what rehabilitation centers could learn from hospital administrators. Mr. Ort of the United Mine Workers presented some facts of their unique rehabilitation program for injured miners.

One of the most valid criteria of any such gathering is what happens (after the shooting is over.) It was with great satisfaction that we observed the establishment of a continuing committee appointed to explore further the requests and recommendations of the participants. It is with confidence that we report the selection of William Page, Administrator of Kessler Institute as the chairman of this committee and it is a pleasure to have been personally delegated as one of its members.

CLASSIFIED ADVERTISING

Classified advertising accepted for POSITIONS WANTED and POSITIONS AVAILABLE only. Minimum rate $3.00 *for* 3 *lines; each additional word ten cents. (Average* 56 *spaces per line). Copy deadline first of each month previous to publication.*

POSITIONS AVAILABLE

Immediate opening for staff occupational therapist in expanding orthopedic department. Correlation of physical therapy and occupational therapy stressed. Generous salary, vacation, sick leave and retirement plan. Apply: Chief of Occupational Therapy, Delaware Curative Workshop, Inc., 16th and Washington Streets, Wilmington, Delaware.

Wanted: Occupational therapist for work in cerebral palsy treatment center. Good salary. Good working conditions. Scholarship available for additional training in cerebral palsy. Program directed by diplomate of the American Board of Physical Medicine. Write Herman L. Rudolph, M.D., 400 North Fifth Street, Reading, Pennsylvania.

Occupational Therapists for large psychiatric hospital located in New England. Progressive, all-inclusive program for patients. Student affiliations with excellent educational program. Modern home, good food. Maintenance optional. Liberal retirement plan and illness policy. Paid vacations and holidays. Write to Director of Occupational Therapy, Norwich State Hospital, Norwich, Connecticut.

Registered occupational therapist for immediate employment in rehabilitation of neurological and orthopedic children and adults, under direct supervision of physiatrist. Should have supervisory ability. Salary range from $3300-$4500. Paid vacation, sick leave, and uniform laundry furnished. Write: Institute of Physical Medicine Rehabilitation, 619 N. Glen Oak Ave., Peoria, Illinois.

Part time position available for registered therapist in pediatric division for Harborview County Hospital, Seattle, Washington. (Four hours in the afternoon at $2,000 a year.) Write: Mrs. James R. Miller, 1019 Belmont Place, Seattle, Washington.

Wanted: Occupational therapist for new teen-age and adult cerebral palsy treatment center. Salary, $3600 for eleven month year. United Cerebral Palsy of Columbus and Franklin County, 741 College Avenue, Columbus, Ohio.

Occupational therapist trained in cerebral palsy work wanted in well-equipped clinic. Minimum salary $3500, with credit given for experience and years of service. Apply to Mrs. Elizabeth Fernandes, 296 Spring St., Trenton 8, N.J.

Wanted—An occupational therapist to take charge of a special sheltered workshop program. Write Evelyn P. Storer, Managing Director, Sheltered Workshop for the Disabled, 200 Court Street, Binghamton, New York.

California needs occupational therapists in physically handicapped program. Starting salary $325, with increases to $395. Liberal vacation, retirement and promotional opportunities. Current opportunity requires official application be in by May 12. Write Dept. 0-10, State Personnel Board, 1015 L Street, Sacramento, California.

Immediate opening: Excellent opportunity for registered therapist. Progressive department with broad and varied activities including new children's program. Paid vacation, holidays, sick leave. Salary $3432-$4200, liberal increase first year, maintenance optional. Write to Personnel Officer, Caro State Hospital for Epileptics, Caro, Michigan.

California opening for two registered occupational therapists (a) director for rehabilitation center, salary $4260-5340, and (b) one with rehabilitation experience, salary $3900-4740. Forty hour week, paid vacation, holidays, sick leave. San Joaquin Rehabilitation Center, 548 S. Wilson Way, Stockton, Calif.

Wanted: Assistant, occupational therapy department. Generalized program. 100 bed capacity. Home for Crippled Children, 1426 Denniston Ave., Pittsburgh 17, Pa.

Western Psychiatric Institute and Clinic (University of Pittsburgh) now has an interesting position open for a staff occupational therapist. Address inquiries to Miss Dorothy J. Wirt, Director of Occupational Therapy, 3811 O'Hara Street, Pittsburgh 13, Pa.

Position open for a registered occupational therapist in a small private psychiatric hospital. Directorship of the department. Write Mrs. D. McNary, O.T.R., Butler Hospital, Providence 6, Rhode Island.

Full time physical and occupational therapists needed. Contact Erie County Crippled Children's Society, Cerebral Palsy Department, 215 West 7th Street, Erie, Penna.

Occupational therapists wanted for large psychiatric hospital at Eloise, Michigan, near Detroit. Salary $3640-$4120, 40 hour week. Civil Service benefits, automatic annual salary increases, paid vacations and sick leave, membership in liberal retirement system. For information or application write the Wayne County Civil Service Commission, 2200 Cadillac Tower, Detroit 26, Michigan.

Occupational therapists and senior occupational therapists; Fairfield State Hospital, Newtown, Connecticut; well-equipped working units; modern buildings; good living facilities. For further information, apply to Superintendent.

Occupational therapists for large psychiatric hospital. Ideal opportunity for those interested in all inclusive program. Modern rooms, good food. Maintenance optional.

Liberal periodic salary increases; holiday, vacation and sick leave benefits. Contact Director of Occupational Therapy, Osawatomie State Hospital, Osawatomie, Kansas.

An occupational therapist is needed at Trustees' Garden Village Treatment Center for Crippled Children. All types of crippling conditions are treated at this center. Salary is in accordance with Association scale. Write Mrs. J. P. Bender, Director, 615 East Broughton St., Savannah, Ga.

Position open for occupational therapist in 85 bed children's orthopedic hospital. Ideal working conditions. Good salary, meals, laundry, month paid vacation plus Christmas holidays, and a five day week. Please contact Miss Maude Gardner, Superintendent, James Lawrence Kernan Hospital, Baltimore 7, Maryland.

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THE AMERICAN JOURNAL of OCCUPATIONAL THERAPY

OFFICIAL PUBLICATION OF THE AMERICAN OCCUPATIONAL THERAPY ASSOCIATION

Vol. VII, No. 2 1953 March-April

Buyers' Guide

Part II

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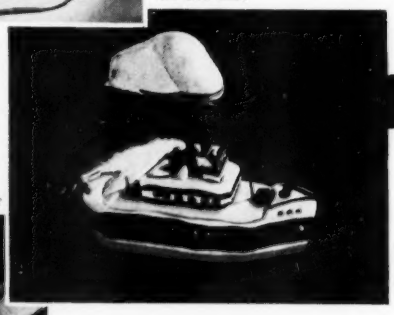

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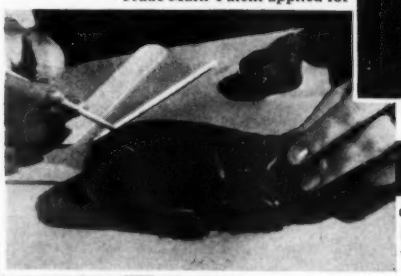

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THE AMERICAN JOURNAL
of
OCCUPATIONAL THERAPY

Official Publication of the American Occupational Therapy Association

Buyers' Guide

March-April 1953 Vol. VII, No. 2, Part II

VISUAL AIDS FOR OCCUPATIONAL THERAPY

BY HAROLD SHALIK

The judicious use of visual aids by the occupational therapist can prove a valuable addition to the training of students; the teaching of crafts to patients; augmenting the knowledge of staff therapists; and the all important task of educating the lay public to the value of occupational therapy. Visual aids as used in this article refer to the use of motion pictures, either silent or sound, and to filmstrips.

Once the occupational therapist has decided that he wishes to use a visual aid, his next problem is the source of the film or filmstrip he desires. The American Occupational Therapy Association publishes a bibliography of occupational therapy films and filmstrips. Aside from this listing there are no other bibliographies compiled specifically for use by occupational therapists. Therefore the author has compiled a bibliography supplementing the May, 1951, A.O.T.A. listing. For the convenience of the therapist the medical section has been annotated where possible, with source references included.

Films and filmstrips when rented should be ordered about thirty days in advance of the date desired. Having secured the film to be used, the question of how to best utilize the film arises. It is important that the film be reviewed by the therapist before showing it. The contents of the film and the running time should be noted, and points of interest in the film correlated with the talk. The audience should always be prepared for the film before it is presented. After the film is presented time should be allowed for a discussion and question session. Where portable equipment is used, the screen should be so placed that it is in a darkened area and easily viewed from all the seats. As a rule any seat outside a sixty degree angle from the screen is out of the viewing area. Arrangements should be made for setting up the projector and screen, *before* the audience arrives. The room's lighting should be checked before the showing to ensure smooth operation of the projector and the easy darkening and relighting of the room when desired. When the windows have to be blocked to darken a room make sure that the room has adequate ventilation, as a warm humid room may result in a sluggish audience, thus deterring from the effectiveness of the film.

FILMS AND FILMSTRIPS FOR USE IN OCCUPATIONAL THERAPY

INSTRUCTIONS

Films: Read as follows:

TITLE; source; running time; rental fee; medical area. Additional material when necessary included in brackets. When information is not available a (—) will be used instead.

Filmstrip: Read as follows:

*TITLE; source; number of frames; sale price; area.

Source materials are included at the end of the listing, and are coded within the listing (e.g. "AF"—listed in source material as, AF Association Films.)

Running time indicated with a number followed by a (′) (e.g. 20′ means twenty minutes running time.)

Rental fee refers to one day rental, and sources should be contacted for rental of more than one day. Rates usually are less for two or more days. Rates apply to days of *actual* showing only. The purchaser usually pays for transportation of films both ways, plus insurance.

The *area* the films cover are coded from "A to R" and are included at the end of the listing (e.g. "A" stands for blind, "B" for counseling.)

For further information regarding any of the films the sources should be contacted.

All films listed are supplementary to the A.O.T.A., May 1951, listing and an attempt has been made to prevent duplication. Several films are available from more than one source, and the source offering the lowest rental fee has been used.

All films listed are 16mm, sound, black and white, except as otherwise indicated.

Filmstrips are marked with an (*).

PART I
Medical Area

1. ACCIDENT SERVICE: IFB; 40'; $5; P. Depicts general principles of industrial rehabilitation in a rehabilitation center for injured coal miners in England.

2. ACTIVITY GROUP THERAPY: CUEF; 50'; $10; N&O. Depicts boys age ten and eleven, emotionally disturbed and socially maladjusted, at play. Covers a two year period.

3. AIDS TO MUSCLE TRAINING: AMA; 12'; —; C (silent). Demonstration of sling suspension exercises for the upper and lower extremities and three kinds of walkers for re-education exercises (AMA).

4. AMPUTATION PROSTHESES AND THEIR USE, PART I, UPPER EXTREMITY: PSAS; 39'; free; M. Describes in detail various types of prostheses and their use including all levels on casts, sockets, fitting alignment, etc. (PSAS).

5. AMPUTATION PROSTHESES AND THEIR USE, PART I, UPPER EXTREMITY: PSAS; 39'; free; M. Describes various types of prostheses in detail.

6. AN INVESTMENT IN HUMAN WELFARE: OVR; 22'; free; P (color). Shows a varied number of handicapped workers performing their jobs and some of the rehabilitation processes by which they are prepared for useful work.

7. ANGRY BOY: IFB; 33'; $4; O. Case history type presentation of a boy. Demonstrates effect of unconscious motivation on behavior.

8. ANNE GREY, OCCUPATIONAL THERAPIST: SM; 20'; $4; L. Depicts fields in which occupational therapy is utilized.

9. APHASIA, PART I, DIAGNOSIS OF APHASIA; USCO; 30'; free; K (color). Shows anatomy, physiology and principles of the disease.

10. APHASIA, PART II, TESTING AND INDIVIDUAL THERAPY FOR APHASIA: USCO; 28'; free; K&Q.

11. APHASIA, PART III, SOCIAL ADJUSTMENT FOR THE APHASIC: USCO; 28'; free; K&Q. Therapeutic treatment for aphasia.

12. APTITUDES AND OCCUPATIONS: CF; 16'; —; B (sale $60). Determination of aptitudes and their correlation with occupations.

13. BACK TO BATTLE: NFB; 22'; —; C&L. Shows recreation, physiotherapy and occupational therapy used with men in bed having casts and splints on.

14. BACK TO NORMAL: PSAS; 16'; free; M. Demonstrates how individuals who have lost a limb can lead a normal life.

15. BE YOUR AGE: AF; 11½'; free; F. A middle aged businessman learns that he can live a happy, useful and active life, although he has had a heart attack (AF).

16. BLIND WORKERS IN PRIVATE INDUSTRY: NSB; 15'; $5; A (color, silent). Shows blind workmen performing a wide variety of operations in industry.

17. BREAKDOWN: MH; 41'; —; L&O. Story of a young female schizophrenic. Electroshock, individual and group therapy, occupational therapy treatment technics shown.

18. BUSY HANDS MAKE HAPPY LIVES: NJCB; 14'; —; A (sale $75). Depicts the Home Industries service in New Jersey.

19. CARE OF THE CARDIAC PATIENT: IU; 32'; $3.75; F&L. Depicts nursing care of a cardiac patient. Role of occupational therapy shown.

20. CARE OF THE FEET: AF; —; $2; M. Shows how walking is accomplished. Points out major foot ailments and suggests remedies.

21. CARE OF THE PATIENT WITH DIABETES MELLITUS (COMPLICATED): IU; 23'; $2.75; D. Shows diagnosis and treatment of coma and insulin shock and the development of healthy attitudes by patient toward his condition.

22. CASE OF APHASIA: PCR; 15'; $2.50; K&Q. Demonstrates general narrowing of mental activity, specific difficulties in finding words, and moderate disturbance in comprehension of 53 year old man.

23. CINEPLASTIC OPERATION: USDD; 20'; free; M.

24. CITY OF THE SICK; NAMH; 20'; $4; O (silent). Depicts life in a mental hospital, with the restoration of an individual to useful living.

25. COMEBACK: OVR; 26½'; free; P. Shows services provided for civilian disabled through the State-Federal system of vocational rehabilitation agencies.

26. CONQUERING DARKNESS: NJCB; 18'; —; A (sale $75). Illustrates nurses calling on blind people in their homes, and guide them to hospitals where examinations, treatment and surgery are performed (NJCB).

27. CONTROL OF VOLUNTARY MUSCLES: SOME PRINCIPLES OF KINESIOLOGY: NWU; 25'; $5; H (color, silent). A series of demonstrations on the contracting and relaxing of various independent muscles, followed by animated drawings.

28. CONVALESCENT CARE AND REHABILITATION OF PATIENTS WITH INJURY TO THE SPINAL CORD: USDD; 41'; free; P (color).

29. COUNSELING—ITS TOOLS AND TECHNIQUES: CMP; 22'; $5; B. Shows tools and technique to use in counseling and how to use them to the best advantage.

30. DATE OF BIRTH: NFB; 16'; $3; E. Describes the importance of giving a fair chance to workers over 45 years of age, and ways in which their problem is being tackled.

31. DEAF POST-RUBELLA SCHOOL CHILD, THE: LSD; 12'; free; Q. Illustrates the capacities and behavior of two groups of children born deaf as a result of maternal rubella in early pregnancy, in their first two years of school life (LSD).

32. DISORDERS OF COORDINATION: IU; 46'; $4.25; K (silent). Tests for coordination disorders and etiology of various disorders.

33. DISORDERS OF GAIT: IU; 34'; $3.75; K. Shows the structure and disorders of the motor part of the trigeminal nerve, the spinal accessory nerve, and the hypoglossal nerve (IU).

34. EARLY DIAGNOSIS OF ACUTE ANTERIOR POLIOMYELITIS: BIS; 15'; $2.50; K.

35. EARLY PLAY: EBF; 15'; $2.50; N (silent). Stresses the importance of determining each youngster's preferences in play and play objects. Play situations at different age levels shown.

36. EARS AND HEARING: EBF; 11'; $2.50; Q. Describes physiology of ear; portrays how ear operates. Explains three causes of impaired hearing and demonstrates use of hearing aid.

37. EDUCATION FOR THE DEAF: BIS; 52'; $6; Q. Shows how deaf children who are mute learn to imitate and mix more freely and grow up as normally as possible.

38. EMBRYOLOGY OF HUMAN BEHAVIOR: IFB; 28'; $12.50; N (color). Traces the development of behavior patterns in the human infant.

39. EMPLOYING BLIND WORKERS IN INDUSTRY: OVR; 17'; free; A & P. The role of the

placement specialist for blind workers is emphasized and types of jobs, safety factors and important points in supervision in connection with blind workers are shown (OVR).

40. EMPLOYING DISABLED WORKERS IN INDUSTRY: OVR; 20′; free; P. Demonstrates by actual cases how disabled persons handle skilled jobs in industry.

41. ESTABLISHING WORKING RELATIONS WITH THE DISABLED WORKER: OVR; 14′; free; P. Demonstrates the tact and judgment which a supervisor must use in establishing working relations for a disabled worker.

42. EYES THAT HEAR: LSD; 16′; $2; Q. Tells the story of adjustment and development through the nursery school, kindergarten, elementary, high and vocational school levels of deaf children.

43. *FACTS FIGHT FEARS: NFIP; 40f; —; K&P (color, free loan). Shows care and rehabilitation of actual patients. Depicts normal nerve cells and those attacked by poliomyelitis (NFIP).

44. FEEBLEMINDED: PCR; 41′; $5; K. Magnitude of problem suggested. Classification of feebleminded given in terms of psychological test results and basic pathology.

45. FEELINGS OF DEPRESSION: NFB; 30′; $3.75; O. Dramatized case study of 30 year old man. Shows depression due to complicated causes.

46. FEELING OF HOSTILITY, THE; NFB; 31′; $3.75; O. The causes of a girls feeling of resentment toward others and the resulting failure in personal relationships are traced in detail from early childhood, through school, college and a career in which her hostility is directed into constructive effort (NFB).

47. FEELING OF REJECTION: NFB; 21′; $2.50; O. Case history of a 23 year old girl who has physical disorders with no physical cause. A psychiatrist shows the root of her trouble.

48. FIRST STEPS: IU; 10′; $2; L&M&N. Shows the physical and social therapy being provided children crippled by paralysis. Occupational therapy for children takes the form of both play and work.

49. FRACTURES: AN INTRODUCTION: JJ; 27′; free; M (color). Combines live action and animation. Shows restoration of patient to a normal way of life as early as possible after injury.

50. FUNCTIONAL ANATOMY OF THE HAND: NFIP; —; free; M (color). Shows normal function of the hand and forearm.

51. GUARD YOUR HEART: AHA; 27′; free; F. Animated diagrams illustrate lectures on heart and heart diseases.

52. HEART AND CIRCULATION: AHA; 12′; free; F. Portrays graphically how heart and blood vessels circulate blood throughout the body.

53. HEART AND HOW IT WORKS, THE: AHA; 11′; free; F (silent). Shows the construction of the heart, its chambers, valves and the one way action, presented by actual dissection and animated drawings (AHA).

54. *HEART OF THE HOME: AHA; —; —; F (color, sound, free loan). Demonstrates work simplification principles in the kitchen which may be applied in any home.

55. HELPING THE BLIND TO HELP THEMSELVES: IHB; 21′; —; A&P. Depicts the entire rehabilitation process of a newly blinded worker.

56. HIS FIGHTING CHANCE: BIS; 10′; $1.50; K&P. A popular account of treatment and therapy given to victims of polio.

57. HOSPITAL SCHOOL: BIS; 11′; $1.50; P. Shows rehabilitation of boys and girls to age 16 at the Treloar Cripples' Hospital and College.

58. I SEE THE WIND: L; 20′; free; A. Each scene is unrehearsed, showing little incidents in the day of a blind child (L).

59. IMPROVING FUNCTIONAL CAPACITY OF SEVERELY INVOLVED UPPER EXTREMITIES: GWS; 57′; free; P (color).

60. INSTITUTE OF PHYSICAL MEDICINE AND REHABILITATION: NYFL; —; $1.; P (color). The film shows in some detail the retraining program, the exercises employed, group training, development of equipment, etc., employed at the Institute.

61. INSTRUCTING THE BLIND WORKER ON THE JOB: OVR; 17′; free; A. Shows a blind person receiving instruction on production drill press job by an expert instructor.

62. INSTRUCTING THE DISABLED WORKER ON THE JOB: OVR; 14′; free; P. Shows how the attitude of an instructor toward a disabled person can affect his success or failure in learning a job.

63. INTRODUCTION TO APHASIA: USCO; 25′; free; Q (color). This is the first of a series of three films on aphasia. It provides general information introductory to the study of the subject.

64. INTRODUCTION TO CLINICAL NEUROLOGY, PART I: IU; 18′; $2.50; K (silent). Reviews the gross anatomy of the brain. Demonstrates a minimal neurological examination of cranial nerves, motor coordination, deep and superficial reflexes, and sensation (IU).

65. INTRODUCTION TO CLINICAL NEUROLOGY, PART II: IU; 20′; $2.75; K (silent). Demonstrates Parkinsonism, chronic epidemic encephalitis, Huntingtons chorea, congenital athetosis, general paresis, choreoathetosis, striate rigidity following cerebral accidents, tabic ataxia, and tabes dorsalis.

66. INTRODUCTION TO CLINICAL NEUROLOGY, PART III: IU; 19′; $2.50; K (silent). Shows several cerebellar symptoms, anterior horn disease symptoms, radial nerve paralysis, ulnar paralysis; median nerve paralysis and peripheral facial paralysis.

67. INTRODUCTION TO CLINICAL NEUROLOGY, PART IV: IU; 17′; $1.50; K (silent). Shows the contrast between functional and organic paralysis cases in carrying out purposeful acts with partially paralyzed members.

68. INVOLUNTARY MOVEMENTS IN NERVOUS DISEASES: IU; 36′; $4; K (silent). Examples of various involuntary movements which result from disease or injury to parts of the nervous system.

69. IT'S A SMALL WORLD: BIS; 38′; $5; N. A day in a nursery school in which a group of youngsters are caught by hidden cameras at their activities.

70. *ISOLATION TECHNIQUE: SBC; 54f; $3; D. Bedside care, disposal of linen, the need for disinfection and other precautions that should be taken when nursing a contagious disease case (SBC).

71. *JOB EVALUATION: MH; —; $4; G. Shows a job analyst preparing a job specification that list the skills and abilities required for the job, and analyzes several methods of job rating (MH).

72. LIFE BEGINS AGAIN: IFB; 21′; $2.50; P. Depicts methods of rehabilitation for men injured in industry or in the Armed Forces.

73. LIFE WITH GRANDPA: PCR; 17′; $3; E. Discusses the problems of old age including degenerative diseases, economic insecurity, and some remedies.

74. LISTENING EYES: JTC; 18′; free; Q (color). Based on the work done by a clinic for preschool deaf and hard of hearing children and their parents (JTC).

75. MIND IN THE MAKING: USCO; 20′; free; O (color). Care and treatment under group therapy plan of patients at a V.A. hospital.

76. MOBILIZATION OF THE HUMAN BODY: AF; —; $4.50; H. A therapist demonstrates with a living model how ligaments can be exercised through body and limb movements to alleviate painful conditions.

77. MOTION STUDY PRINCIPLES WITH APPLICATIONS SHOWING BETTER AND EASIER WAYS TO WORK: IU; 20'; $3.75; G.

78. MOTO-KINESTHETIC METHOD OF SPEECH CORRECTION: UDP; —; —; Q (sale $75, color). Presents the Hill-Young method of speech correction with actual cases.

79. MUSCLES: EBF; 15'; —; H (sale $24, silent). The structure and use of muscles are presented by means of actual photography and animation.

80. NERVOUS SYSTEM: IU; 11'; $2; K. Structure and physiology of nervous system shown.

81. NEUROSURGERY: MANAGEMENT OF SPINAL CORD INJURIES: USDD; 11'; free; K (color). How to treat spinal cord injuries by surgery, orthopedics, bladder resection, physiotherapy and exercises (USN).

82. NEW PRINCIPLES IN LOWER EXTREMITY PROSTHESES: PSAS; 24'; free; M (silent). Demonstrates the knee lock in above-knee artificial limbs (PSAS).

83. NEW VOICES: IU; 15'; $3.75; Q. Demonstrates period of rehabilitation of the patient with cancer of the larynx.

84. NURSING CARE IN POLIOMYELITIS, PART I, THE ACUTE STAGE: ONAS; 20'; free; K. Arrangements of the bed, applying hot packs, use of pillows and sand bags, foot boards and other devices and techniques for the care of the patient are illustrated (ONAS).

85. NURSING CARE IN POLIOMYELITIS, PART II, TREATMENT OF SPASM: ONAS; 22'; free; K. Muscle spasticity, detailed administration of hot packs shown.

86. NURSING CARE IN POLIOMYELITIS, PART III, CARE OF THE RESPIRATOR PATIENT: ONAS; 15'; free; K. Preparation of the respirator, introducing the patient to the respirator, and nursing care and techniques are dealt with (ONAS).

87. NURSING CARE IN POLIOMYELITIS, PART IV, THE CONVALESCENT STAGE: ONAS; 11'; free; K. The application of splints, use of pillows, bed trapeze for exercise, underwater exercise in tanks, respirator exercises and administration of neuromuscular tests are shown.

88. OESOPHAGEAL SPEECH: BIS; 10'; $1.50; Q. Demonstrates a method of providing the laryngectomized person with a substitute for normal speech.

89. ON OUR OWN: NFIP; 14'; free; P. Physical phase of rehabilitation from patient's viewpoint.

90. ORTHOPEDIC REHABILITATION OF SPINAL CORD INJURIES: ICD; 25'; free; P.

91. OTITIS MEDIA IN PEDIATRICS: MFG; 35'; free; N (color). Discusses the importance of the infectious diseases of infancy and childhood in the development of otitic inflammations.

92. OUT OF BED INTO ACTION: IFB; 30'; $4; P. Rehabilitation of hospitalized Army Air Force personnel.

93. OUT OF TRUE: BIS; 38'; $5; O. Documentary type film depicting woman who attempted suicide who is brought to a mental home where analysis and treatment go to source of trouble.

94. OVER-DEPENDENCY: NFB; 32'; $3.75; O. Case history presentation of young man with psychosomatic ills and their relation to his over-dependency on others since childhood.

95. PAPWORTH VILLAGE SETTLEMENT: BIS; 19'; $2.50; P&R. Demonstrates how tubercular patients are trained for suitable light work in the Settlement's factories.

96. PAY ATTENTION: PROBLEMS OF HARD-OF-HEARING CHILDREN: PCR; 29'; $4; Q. Case histories illustrating problems of hard-of-hearing children. Hearing aids, lip reading and teaching techniques covered.

97. PLASTIC AND RECONSTRUCTION SURGERY OF THE HAND: USCO; 34'; free; M (color). Principles of traumatic and late reconstruction surgery of the hand discussed.

98. PLASTIC SURGERY OF THE HAND: USDD; 12'; free; M (color). Shows cases of traumatic surgery of hand and elective surgery in hand reconstruction; how to restore function (USDD).

99. POLIOMYELITIS—DIAGNOSIS AND MANAGEMENT: BIS; 60'; $6; K&P. Early diagnosis and subsequent management discussed. Rehabilitation of patient also shown.

100. POSTURE: IU; 15'; $1.50; H (color). The part played by muscles in posture and how to correct poor posture discussed.

101. POSTURE AND EXERCISE: IU; 11'; $2; H. Discusses the relation of the nervous system to skeletal muscles, motor units, muscle tonus in relation to posture.

102. PROBLEMS OF RHEUMATOID ARTHRITIS, THE: ARF; 28'; free; D.

103. PSYCHIATRY IN ACTION: AF; 62'; $5; O&P. The story of England's program of rehabilitation with service and civilian casualties of World War II. Individual and group therapy discussed.

104. QUIET ONE, THE: AFI; 67'; $25; O. Portrays the struggle and confusion of a child who feels unwanted. Depicts his rehabilitation.

105. RECONDITIONING IN THE ETO: USDD; 29'; free; C&L. Covers the phases of physical and occupational reconditioning as practiced in the ETO (USDD).

106. RECOVERY: AWS; 15'; free; P&R (color). Readjustment of recovered T.B. patient discussed, and his adjustment through a sheltered workshop at Altro.

107. *RECREATIONAL AND OCCUPATIONAL THERAPY: USOE; 35f; $1; L.

108. REHABILITATION FOR PARKINSON'S SYNDROME: MFG; 54'; —; P (color).

109. RETURN TO ACTION: BIS; 19'; $2.50; P. Treatment and rehabilitation of the disabled discussed.

110. RHEUMATOID ARTHRITIS: MFG; 42'; free; D (color). Supportive measures, physical medicine, X-ray therapy, ACTH, and cortisone for spondylitis discussed.

111. SAFETY IN THE SHOP: IU; 13'; $1.50; G. Shop accidents and some causes discussed. Supervisor's role shown.

112. SEIZURE: USCO; 45'; free; K. Discusses the common clinical findings of epileptic seizures and the methods for their diagnosis and control.

113. SHADES OF GRAY: USDD; 66'; free; O. Causes and treatment of psychoneurosis in the Army.

114. SKILLED ACTS: IU; 37'; $4; K (silent). Shows the disturbances of skilled acts produced by paresis or paralysis, by disorders of coordination, by Parkinsonism and by apraxia (IU).

115. SO THEY MAY WALK: EKF; 15'; free; E (color). Highlights of Sister Kenny method of treatment.

116. SOCIAL ADJUSTMENT OF THE APHASIC PATIENT: USCO; 25'; free; P&Q (color). Shows the problems of social reorientation encountered by aphasic patient. Use of group psychotherapy, physical therapy, language retraining, and outside socialization described.

117. SOCIAL ADJUSTMENT OF THE BLINDED SOLDIER: USDD; 29'; free; A. Methods used at the Avon School, Connecticut, shown.

118. SPEECH TRAINING FOR THE HANDICAPPED CHILD: UJCC; 30'; free; P&Q (color).

Shows planning and therapy of intensive treatment centers of such conditions as cleft lip and palate deformities and cerebral palsy.

119. STEPS OF AGE: IFB; 25′; —; E (sale $95). Shows the emotional problems and interpersonal relations within the family faced by a woman of 62 who must retire from her job (IFB).

120. STORY OF LUCY, THE: KI; 17′; $3; P (color). Educational film portraying the ten month rehabilitation program of a twenty-five year old paraplegic woman and her return to full employment (KI).

121. SUCTION SOCKET AMPUTEE TRAINING: PSAS; 20′; free; M (silent). Demonstrates some of the methods used in teaching amputees with suction sockets to walk (PSAS).

122. SWINGING INTO STEP: PSAS; 33′; free; P. Rehabilitation and morale film for amputees.

123. SYMPTOMS IN SCHIZOPHRENIA: PCR; 18′; $1.75; O (silent).

124. TEACHING CRUTCH WALKING: IU; 13′; $1.50; P. Shows bed reconditioning exercises, use of the walker, two and four point and swing through gait, and teaching patient to sit, rise, and climb stairs.

125. TESTING AND INDIVIDUAL THERAPY FOR THE APHASIC PATIENT: USCO; 25′; free; P&Q (color). Shows testing and rehabilitation procedures for aphasics of different types as practiced in V. A. clinics.

126. THERAPEUTIC EXERCISE: INFORMATION: USDD; 17′; free; C. Overall view of therapeutic exercise in Army medicine demonstrating how much can be accomplished through exercises in rebuilding broken bones (USA).

127. THERAPEUTIC EXERCISE: ORTHOPEDICS: USDD; 28′; free; C&M. Technique employed in treating serious injuries of the knee joint; prescribed and supervised program of continuous and progressive exercise.

128. THERAPEUTIC EXERCISE: THORACIC SURGERY: USDD; 28′; free; C. Post-operative problems and specific details regarding pre-operative exercises; treatment and exercise a patient receives until he is discharged from the hospital.

129. *THESE UNTRAINED TONGUES, PART I, THE NATURE OF SPEECH DEFECTS: UDP; 55f; $6.50; Q. Shows the classification of speech disorders and the physical and non-physical causes of these disorders.

130. *THESE UNTRAINED TONGUES, PART II, HOW SPEECH DEFECTS DEVELOP: UDP; 49f; $6.50; Q. Intelligence and learning capacity, rehabilitation possibilities, and the role of the speech defective child discussed.

131. *THESE UNTRAINED TONGUES, PART III, WHAT SPEECH CLINICS ARE DOING: UDP; 46f; $6.50; Q. The education and therapy for the speech defective child and his parent are described.

132. THEY LIVE AGAIN: IFB; 18′; $2.50; P. Describes the program at a rehabilitation center for coal miners in England.

133. TO HEAR AGAIN: USDD; 37′; free; P&Q (color). Army's aural rehabilitation program; testing, treatment and social rehabilitation; use of hearing aids and lip reading stories of several patients (USA).

134. TODAY AND TOMORROW: MDA; —; free; J (color).

135. TRIUMPH OVER DEAFNESS: BIS; 20′; $2.50; Q. Discusses the methods by which deaf children are taught to speak.

136. UNDEFEATED, THE: BIS; 40′; $5; O&P. Documentary of the physical and mental rehabilitation of a young man, who is a double leg amputee.

137. UNDERSTANDING CHILDREN'S PLAY: PCR; 12′; $1.65; N. Play devices used with children of beginning school age shown. Discusses importance of play techniques in personality evaluation and adjustment.

138. V FOR VOLUNTEERS: AF; 20′; $4; —. Story of how individuals are introduced to volunteer work.

139. VALUE OF LIFE: EKF; 10′; free; K. Explains Sister Kenny treatment of polio, using case presentations.

140. VISUAL HEARING FILMS: OSU; 8 to 10′; $5; Q (silent, color, set of thirty films). Used as aid in teaching lip reading. Each film complete, arranged in order of difficulty.

141. WE SEE THEM THROUGH: AHA; 20′; free; D. Story of children with rheumatic fever and their treatment by physician, social worker, and parent's cooperation.

142. WELCOME SOLDIER: IFB; 13′; $2.25; P. Shows Canada's rehabilitation program for discharged service personnel.

143. WHERE LIFE BEGINS AGAIN: LOM; 27; —; D (sale $48). Shows life at Moosehaven Home for the Aged in Florida.

144. YOUR VOICE: EFB; 11′; $2.50; Q. Anatomy and physiology of voice production shown.

PART II

Craft Area

1. ABC OF POTTERY MAKING (COIL METHOD): IU; 9′; $1.75.

2. ABC OF PUPPETS: TYPE I: IU; 10′; $1.75.

3. *AMERICAN BRAIDING CRAFT: SVE; 58f; $3.25.

4. ART OF LEATHER CARVING: IU; 20′; $5.50 (color).

5. ART OF LEATHER CARVING: SB; —; free (color).

6. BLOCK PRINTING: IU; 12′; $1.75.

7. *CANNING STEP BY STEP: SBC; 43f; $3.

8. *CERAMICS: SVE; 60f; $3.25.

9. CLAY POTTERY: IU; 10′; $1.75.

10. *CONTACT PRINTING: MH; 67f; $5.

11. CRAFTSMANSHIP IN CLAY: IU; 10′; $3 (color, four films). GLAZE APPLICATION.

12. CRAFTSMANSHIP IN CLAY: SIMPLE SLAB METHODS.

13. CRAFTSMANSHIP IN CLAY: STACKING AND FIRING.

14. CRAFTSMANSHIP IN CLAY: THROWING.

15. CREATIVE HANDS: HF; 30′; $3 (silent).

16. *CUT-OUTS UP-TO-DATE: SBC; 40f; $5 (color).

17. *DEVELOPING ROLL FILM: MH; 62f; $5.

18. *DEVELOPING SHEET FILM AND FILM PACKS: MH; 46f; $5.

19. DEVELOPING THE NEGATIVE: UWF; 16′; —.

20. ELEMENTARY BOOK BINDING: BF; 10′; $2 (silent).

21. ELEMENTARY BOOK BINDING: IU; 13′; $1.75.

22. FINGER PAINTING: AF; —; free.

23. FUNDAMENTALS OF PHOTOGRAPHY: DEVELOPING THE NEGATIVE: IU; 16′; $2.50.

24. FUNDAMENTALS OF PHOTOGRAPHY: PRINTING THE POSITIVE: IU; 19′; $2.50.

25. FURNITURE CRAFTSMEN: EBF; —; $2.50.

26. *FURNITURE JOINERY: SVE; 58f; $3.25.

27. HOW YOUNG AMERICA PAINTS: IU; 11′; $3 (color).

28. KNIFECRAFT: IU; 11′; $1.75.

29. LEATHER CARVING: JCL; —; free (color).
30. LEATHER MAKING: LF; 20′; —; (sale $60).
31. LEATHER WORK: IU; 12′; $1.75.
32. LEATHERWORK: IU; 22′; $3.25.
33. *LEATHERWORK AND WHITTLING: SVE; 47f; $3.25.
34. LOOM, THE: IU; 12′; $1.75.
35. LOOM WEAVING: IU; 10′; $1.75.
36. MAKE A LINOLEUM BLOCK: EK; 15′; $2 (silent).
37. *MAKING A PROJECT WITH HAND TOOLS: SVE; 58f; $3.25.
38. MAKING A SERIGRAPH: HF; 30′; $6 (silent, color).
39. METAL CRAFT: EBF; —; $2.50.
40. *METALWORK, BENDING AND BEATING DOWN METAL: SVE; 48f; $3.25.
41. *METALWORK, JOINTING AND FINISHING ART METAL: SVE; 49f; $3.25.
42. *METALWORK, LAYING OUT, CUTTING, FILING, AND DRILLING: SVE; 50f; $3.25.
43. *METALWORK, RAISING AND SURFACE DECORATION: SVE; 50f; $3.25.
44. *NATIVE CRAFTS: SVE; 48f; $3.25.
45. PAINTING: LEARNING TO MIX COLORS: YAF; 5′; —; (color).
46. PAINTING: LEARNING TO USE YOUR BRUSH: YAF; 10′; —.
47. PAINTING: SOLID FORMS: YAF; 10′; —.
48. PAPER SCULPTURE: IFB; 5½′; $2 (color).
49. POTTERY MAKING: IU; 11′; $2.
50. PRINTING THE POSITIVE: UWF; 19′; —; (color).
51. *PROJECTION PRINTING, PART I: MH; 50f; $5.
52. *PROJECTION PRINTING, PART II: MH; 36f; $5.
53. *SAFETY "KNOW HOW" IN THE WOODSHOP: SVE; 51f; $3.25.
54. SCULPTURING IS FUN: UWF; 10′; free.
55. SEWING: ADVANCED SEAMS: YAF; 10′; —.
56. SEWING: CHARACTERISTICS AND HANDLING OF MATERIALS: YAF; 10′; —.
57. SEWING: FITTING A PATTERN: YAF; 10′; —.
58. SEWING: FUNDAMENTALS: YAF; 10′; —.
59. SEWING: PATTERN INTERPRETATION: YAF; 10′; —.
60. SEWING: SIMPLE SEAMS: YAF; 10′; —.
61. SEWING: SLIDE FASTENERS: YAF; 10′ —.
62. SILK SCREEN PRINTING: IU; 18′; $3.25.
63. SIMPLE BLOCK PRINTING: BF; 10′; $2.
64. *SPOT PRINTING AND DODGING: MH; 42f; $5.
65. TECHNIQUE OF THE SILK SCREEN PROCESS: BF; 15′; $2 (silent).
66. TIPS ON TYPING: IU; 20′; $2.75.
67. TOYS FROM ODDS AND ENDS: BF; 10′; $2.
68. *WOODWORKING MACHINES: SVE; 39f; $3.25.
69. *YOU CAN MAKE JEWELRY, PART I: SVE; 42f; $3.25.
70. *YOU CAN MAKE JEWELRY, PART II: SVE; 41f; $3.25.

SOURCES

AF	Association Films; 35 West 45th Street, New York 19; Catalogue.
AFI	Athena Films, Inc.; 165 West 46th Street, New York.
AHA	American Heart Association; 1790 Broadway, New York.
AMA	American Medical Association; Committee on Medical Motion Pictures; 535 N. Dearborn Street, Chicago 10, Ill.; Physical Medicine Listing.
ARF	Arthritis and Rheumatism Foundation; 23 West 45th Street, New York 19.
AWS	Altro Work Shops, Inc.; 1021 Jennings Street, New York 60.
BF	Brandon Films; 200 West 57th Street, New York.
BIS	British Information Service; 30 Rockefeller Plaza, New York; Catalogue.
CF	Coronet Films; Coronet Building, Chicago 1, Ill.
CMP	Carl F. Manke Productions; 215 East 3rd St., Des Moines, Ia.
CUEF	Columbia University Educational Films; 413 West 117th Street, New York 27.
EBF	Encyclopedia-Britannica Films; 342 Madison Ave., New York 17.
EK	Elias Katz; 1128 S. Vegas Street, Alhambra, California.
EKF	Sister Elizabeth Kenny Foundation; 2400 Foshay Tower; Minneapolis 2, Minn.
GWS	Georgia Warm Springs Foundation; Physical Medicine Department; Warm Springs, Ga.
HF	Harmon Foundation; Division of Visual Exp.; 140 Nassau Street, New York 38.
ICD	Institute for Crippled and Disabled; 400 First Ave., New York.
IFB	International Film Bureau; 6 N. Michigan Avenue, Chicago, Ill.; Catalogue.
IHB	Industrial Home for the Blind; 520 Gates Avenue; Brooklyn 16, N.Y.
IU	Indiana University; Audio-Visual Center; Division of Adult Education and Public Services; Bloomington, Indiana; Catalogue.
JCL	J. C. Larson Co.; 820 S. Tripp Ave., Chicago 24, Ill.
JJ	Johnson and Johnson; Promotion Department; New Brunswick, N.J.
JTC	John Tracy Clinic; The; 924 West 37th Street, Los Angeles 7, Cal.
KI	Kessler Institute for Rehabilitation; Pleasant Valley Way; West Orange, N.J.
L	Lighthouse; 111 East 59th Street, New York.
LF	Library Films, Inc.; 25 West 45th Street, New York 19.
LOM	Loyal Order of Moose; Mooseheart, Ill.
LSD	Lexington School for the Deaf; 904 Lexington Ave., New York 21.
MD	Muscular Dystrophy Association of America; 21 East 40th Street, New York 16.
MFG	Medical Film Guild; 167 West 57th Street, New York 19; Catalogue.
MH	McGraw-Hill Co.; Text Film Department; 330 West 42nd Street, New York; Catalogue.
NAMH	National Association for Mental Health; 1790 Broadway, New York 19. Catalogue.
NFB	National Film Board of Canada; 1270 Avenue of the Americas, New York; Catalogue.
NFIP	National Foundation for Infantile Paralysis Inc.; 120 Broadway; New York 5.
NJCB	N.J. State Commission for the Blind; 1060 Broad Street, Newark, N.J.
NSB	National Society for the Blind; 727 Woodward Building, Washington, D.C.
NWU	Northwestern University; Audio-Visual Medical Education; 303 E. Chicago Avenue, Chicago, Ill.
NYFL	N.Y. University Film Library; 26 Washington Place, New York 3; Catalogue.

ONAS	Orthopedic Nursing Advisory Service; 2 Park Avenue; New York 16.
OSU	Ohio State University; Department of Speech; Derby Hall, Columbus, Ohio.
OVR	Office of Vocational Rehabilitation; Federal Security Agency; Washington 25, D.C.
PCR	Psychological Cinema Register; Pennsylvania State College; State College, Pa.; Catalogue.
PSAS	Prosthetic & Sensory Aids Service; V.A.; 252 Seventh Avenue, New York; Catalogue.
SBC	Stanley Bowmar Co.; 513 West 166th Street, New York 32.
SM	Samuel N. Mukaida; 120 Thompson Street, New York.
SVE	Society for Visual Education; 1345 Diversey Parkway, Chicago, Ill.: Catalogue, request local dealer.
UDP	University of Denver Press; University Park, Denver 10, Col.
UICC	University of Illinois; Division of Services for Crippled Children; 1105 S. 6th Street; Springfield, Ill.
USCO	Central Office Film Library; U.S. Department of Agriculture: Washington 25, D.C.
USDD	U.S. Department of Defense; Office of Public Information; Washington 25, D.C.
USOE	U.S. Office of Education; Washington, D.C.
UWF	United World Films; 445 Park Avenue, New York; Catalogue.
YAF	Young America Films; 18 East 41st Street, New York; Catalogue.

MEDICAL AREAS

A—Blind: 16, 18, 26, 39, 55, 58, 61, 117.
B—Counseling: 12, 29.
C—Exercise: 3, 13, 105, 126, 127, 128.
D—General Medicine: 21, 70, 102, 110, 141, 143.
E—Geriatrics: 30, 73, 115, 119.
F—Heart Disease: 15, 19, 51, 52, 53, 54.
G—Job Studies: 71, 77, 111.
H—Kinesiology: 27, 76, 79, 100, 101.
J—Muscular Dystrophy: 134.
K—Neurological Disorders: 9, 10, 11, 22, 32, 33, 34, 43, 44, 56, 64, 65, 66, 67, 68, 80, 81, 84, 85, 86, 87, 99, 114, 139.
L—Occupational Therapy: 8, 13, 19, 48, 105, 107.
M—Orthopedics: 4, 5, 14, 20, 23, 48, 49, 50, 82, 97, 98, 121, 127.
N—Pediatrics: 2, 35, 38, 48, 69, 91, 137.
O—Psychiatry: 2, 7, 17, 24, 45, 46, 47, 75, 93, 94, 103, 104, 113, 123, 136.
P—Rehabilitation: 1, 6, 25, 28, 39, 40, 41, 43, 55, 56, 57, 59, 60, 62, 72, 89, 90, 92, 95, 99, 103, 106, 108, 109, 116, 118, 120, 122, 124, 125, 132, 133, 136, 142.
Q—Speech and Hearing: 9, 10, 11, 22, 31, 36, 37, 42, 63, 74, 78, 83, 88, 96, 116, 118, 125, 129, 130, 131, 133, 135, 140, 144.
R—Tuberculosis: 95, 106.

Editorial Note: A recent film issued too late to classify: MIRACLE ON SKIS: 16'; available from Welfare of Cripples, 127 E. 52nd St., New York, for $1 or from Regal Pictures, 246 Stuart Street, Boston, Mass., for $25 rental, $90 outright. Documentary film of two skiers, one single and one double amputee, who mastered their disabilities and learned to ski again. The star is the double amputee who is now skiing instructor in Austria and chairman of the section of mutilated members of the Austrian Ski Association.

Events Calendar

April 23 - 25, 1953

First Western Hemisphere Conference of the World Medical Association in conjunction with Pan American Medical Confederation. Medical College of Virginia, Richmond.

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June 15 - 19, 1953

Conference of the American Physical Therapy Association, Baker Hotel, Dallas, Texas.

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May 3 - 9, 1953

Mental Health Week.

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Nov. 13 - 20, 1953

Conference of the American Occupational Therapy Association, Shamrock Hotel, Houston, Texas.

NEW DEPARTMENT

A department of occupational therapy will be started with the enrollment of students in September, 1953, at the University of Texas, Medical Branch, Galveston, Texas. Miss Elyda A. Seely, O.T.R., will be the director of the new school.

SCHOLARSHIP AWARD

American Hearing Society announced March 1 as opening date of competition for the 1953 Kenfield Memorial Scholarship awarded annually by this agency to a prospective teacher of lip reading to the hard of hearing. Application blanks may be obtained from Miss Rose V. Feilbach, chairman of the Society's Teachers Committee, 1157 North Columbus St., Arlington, Va. Deadline for returning applications, completed, is May 1.

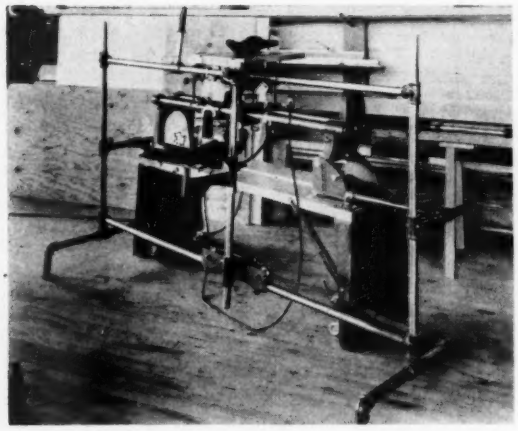
Winner of the award is entitled to take a teacher training course in lip reading from any normal training teacher, school or university in the United States acceptable to the American Hearing Society's Teachers Committee. The scholarship is to be used within one year from date of award.

Two new bibliographies are now available from the National Society for Crippled Children and Adults, 11 S. La Salle St., Chicago 3, Illinois. The one entitled "A Selective Bibliography of Material on Cerebral Palsy" is a bibliography of the material on cerebral palsy available on loan from the library of the National Society for Crippled Children and Adults.

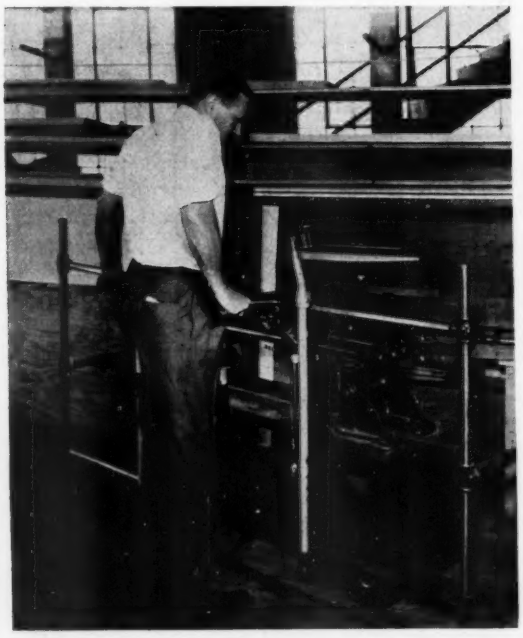
The other bibliography is a selected list entitled "Books and Pamphlets on Rehabilitation." The list price and publishers' addresses are included for easy ordering from local bookstores or directly from publishers.

PRACTICAL POWER WOODWORKING FOR PARAPLEGICS

MISS ANNE MURANY, O.T.R., and
T. H. CARMODY, JR.*



View of Para-Seat mounted on Shopsmith. These pictures were taken at the May T. Morrison Center for Rehabilitation in San Francisco where the Para-Seat was tested. Mr. Carmody is shown demonstrating it.



This view shows how handles are used in horizontal position for entering or leaving seat. A simple half-turn locks these in position to support several hundred pounds. Seat may be entered from wheel-chair or from crutches.

The therapeutic and avocational values of woodworking are well known. The stimulation and satisfaction that many handicapped persons derive from doing creative work is measurably increased when they are able to make useful and practical things. With many patients the possibility of developing hand-crafts to a point where they can be turned to a profit provides an additional incentive.

A great many handicapped persons learn to work with hand tools and then find themselves stopped from real development of a craft because of their inability to operate power tools. Instead of being a boon to the handicapped, in most cases the power tool represents a hazard, particularly if he has had no previous experience or training in its use. In other cases handicaps prevent convenient or comfortable operation of standard types of tools.

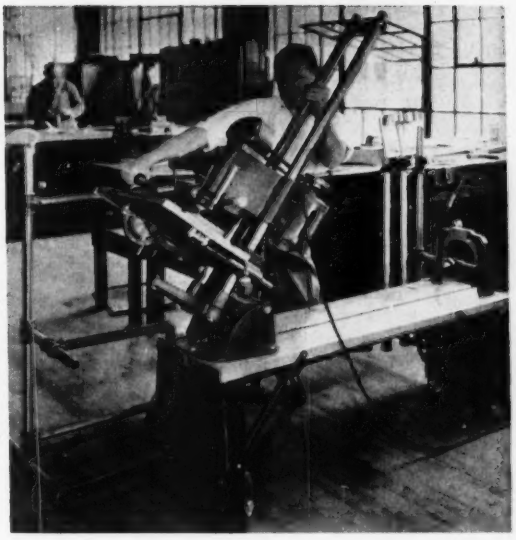
Both safety and comfort factors are encountered in the cases of paraplegics and many leg amputees. Even where no hand, arm or shoulder involvement is present these types of handicapped persons find the use of power tools inconvenient and unsafe even when they have had previous experience using them. The principal difficulty is the inability to maintain balance, particularly in holding the upper part of the body erect, when doing activities that require leaning forward. Thus in operating a power tool the danger of toppling into the work is an ever present threat.

A device that makes power woodworking practical for the paraplegic has been developed and found satisfactory. This is a safety seating arrangement, called *Para-Seat* that was designed by one of the authors. It is intended to be used with Shopsmith, a multi-purpose woodworking tool which permits all important phases of power woodworking without requiring the operator to move from tool to tool. Sawing, drilling, sanding and turning can be done on the one machine, and a wide range of accessories permit such refinements

*Miss Murany is the Director of O.T. in the Tuberculosis Division of the San Francisco City and County Hospital.

Mr. Carmody is the inventer of *Para-Seat*. He is a paraplegic-type polio and was a patient at the Morrison Center for Rehabilitation in San Francisco, California. Mr. Carmody was the Assistant Division Manager, Northern Pacific Division, McGraw-Hill Publishing Co., San Francisco at the time he contracted polio. Since then, he has gone back to his old position. He worked out the plans for *Para-Seat* in order that he could once again use his own Shopsmith at home with safety since woodworking has been his hobby for many years.

Here the user is in position with Shopsmith set up for horizontal drilling. One handle is secured in the vertical position for protection against forward-falling; the other is horizontal to provide leverage for pulling seat into position. The safety belt protects against falling backwards.



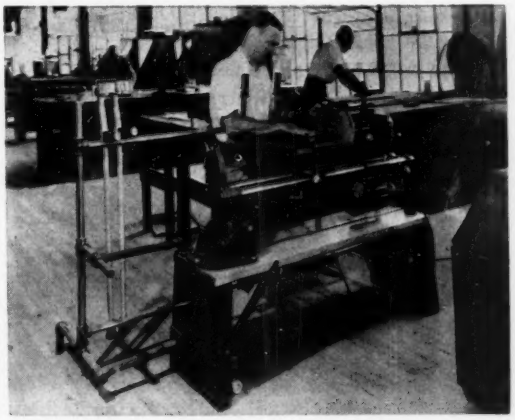
Raising Shopsmith for vertical drilling. One handle provides a handhold for leverage, the other is being used as a backrest.

as jointing and routing. Even fine cabinet work can be accomplished on this tool.

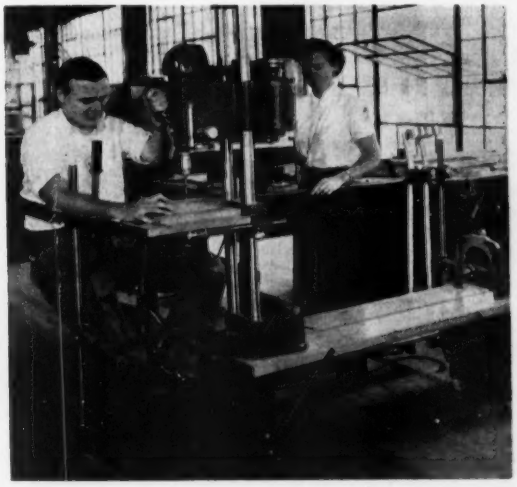
Para-Seat is a comfortable saddle-seat (actually a standard motorcycle seat) mounted on a frame that is bolted to the Shopsmith bench. The seat is mounted on rollers so that it can traverse the length of the tool permitting the operator to position himself wherever necessary for the work he wants to do. This also makes minor adjustments in position simple and quick as the work progresses. The seat is adjustable to various heights and may be moved in or out from the machine to suit the size of the user.

Two adjustable handles, each about twelve inches long, are mounted on the upper transverse bar of the framework. These may be moved easily anywhere on the bar and fixed in either a horizontal or vertical position. They provide handholds for entering or leaving the seat and for moving the seat along the bar as desired. In the vertical position they provide support for the chest so that the operator can fall or lean against them without danger of falling into the working machinery. These handle-bars are the key to the safety and practicality of the device for paraplegics

(*Continued on page* 101)



This shows the set-up for sanding. Both handles are in the vertical position. They are long enough so the arm-pit will not slide over them. Note how the arrangement leaves the hands and arms free to work.



Vertical drilling is accomplished in this position.

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An electric pen set called the OSBRO GOLD STYLIST PEN SET is now available from Osborn Bros. The set ($19.95) includes a metal stand for embossing small objects, an electric ballpoint pen, a built in 600-inch roll of gold paper and an 8-ft. cord and plug for an AC outlet. It is safe, easy to operate and enables anyone to imprint bright gold monograms on any number of articles.

* * *

For an interesting list of "How-to" books and some clever art books, write for the spring catalog of the Sterling Publishing Co., Inc., 122 East 25th Street, New York 10, N.Y.

* * *

The KNIFORK (A.J.O.T., Vol VI, No. 6, page 281) is now available with sterling silver handles ($15.00) in both the standard 7″ size and the travelers 6″ size. The latter fits in most optical cases.

* * *

The Lily Mills Company's new booklet on the INKLE LOOM is extremely well illustrated so that any one can easily master the use of the loom. Because the loom is inexpensive ($7.50) and light weight, it should be popular with a variety of patients of all ages.

* * *

The GOLKA TIPPING PLIERS is now available for applying leather lacing tips. It is a clipping pliers with a small hole for forming round tips. If the lacing tip is to be used on chisel punched holes, the tip may be flattened with the front of the pliers after being applied to the lacing. The metal lacing tips, which are low in price and disposable, and the pliers are a great boon to effective lacing especially for occupational therapists who must offer their patients easily mastered activities.

* * *

One advantage of the leather kits offered by ART HANDICRAFT CO. is that the kits come individually wrapped in their own gift box for

(*Continued on page* 105)

THE SHOE PROBLEM OF THE ONE-HANDED

FRANK W. JACKSON, O.T.R.
Veterans Administration Hospital
Salt Lake City, Utah

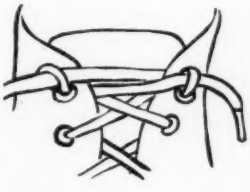
When a person, because of paralysis, accident, surgery or other cause, finds himself without the use of one upper extremity, he is faced with some problems which at first may appear insurmountable. One of the things he finds most difficult to do is to care for himself with his one useful extremity, especially if this extremity is the unskilled one. In the dressing procedure, he encounters the difficulty of keeping the shoes tied comfortably tight on his feet.

The knot to be described appears to side step the disadvantages of the common bow knot and is recommended because it allows the one-handed person to wear any style of shoe that suits his taste. (1) With little practice it can be tied with ease with either the right or left hand. (2) When once tied, the likelihood that it will slip is minute, for each step exerts pressure against it and thus assures its integrity. (3) Because tips and loops do not lie side by side, there is no tangling hazard experienced during untying. (4) Both tips lie together on the dorsal arch and can be easily grasped together to untie the knot down to the second eyelets in a single pull.

How to Tie this Knot

Step 1. Lace the shoe to the top.

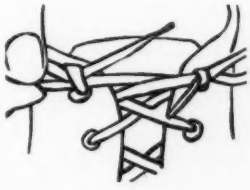
Step 2. Pass the lace tips back through the top eyelets on the same side, pulling them until small eye-loops are left big enough to pass the lacing through twice.



Step 3. Pass the tips from the opposite sides through these eye-loops.

Step 4. Now pass the tips back through these same eye-loops to form the major loops.

Step 5. The knot is now ready to be tightened. Grasp and pull the eye-loop on each side to tighten the lacing crossing up from the second eyelets.



Step 6. Now tigkten the eye-loops by pulling the lace forming the major loops on the opposite sides.

Step 7. Be sure not to pull the tip side of the loop, but rather the lace just after it has passed through the eye-loop from the opposite side.

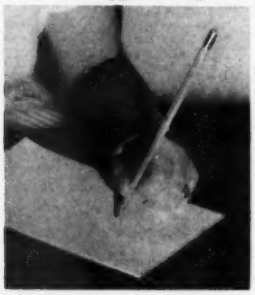
Step 8. Repeat once or twice this tightening process, remembering that the tightening of an eye-loop is accomplished beyond the eye-loop of the opposite side.

Now grasp the heel of the shoe and pull down so that the arch of the foot is thrust against the lacing to further set the eye-loops. The knot is now tied. This knot has been tested hundreds of times and has not once failed.

THE OPPONENS SPLINT*

Viola W. Svensson, O.T.R.
Miriam C. Brennan, O.T.R.

Without Opponens Splint



With Opponens Splint

The opponens splint is used in the treatment of weakened thumbs due to polio in order to:

1. Hold the thumb in the position of function so the hand may be used properly in opposition, and also to keep the other muscles of the hand in good condition through use.

2. Prevent adduction and extension contracture of the thumb. If the muscles of opposition do not return to functional capacity, the thumb is in the proper position for an opponens transfer, should the surgeon decide upon such a procedure.

3. Prevent a stretch on the muscles of opposition which may not only slow down recovery, but also impede return of power.

4. Keep better tone in the muscles of derotation and reposition by using this elastic traction-type splint which replaces artificially the pull of the weakened muscles of opposition.

The basis for these statements is as follows:

In opposition in the normal hand there is a combination of motions which overlap, but which can be broken down into

1. Abduction (abductor pollicis, longus and brevis)
2. Flexion (flexor pollicis longus and brevis)
3. Medial Rotation (opponens pollicis)
4. Holding (adductor pollicis)

Then *Reposition,* or return from opposition is composed of

1. Lateral Rotation (abductor policis longus)
2. Abduction (abductor policis brevis and longus)
3. Extension (extensor pollicis longus and brevis)

The splint attempts to hold the thumb in a position of abduction, medial rotation with the thumb in a line with the second finger, and slight flexion at the m.c.p. joint.

Because the hand is held in the position of function, the patient can hold small to medium sized objects, i.e., an apple, pick up type, hold a pencil properly, and even open bobby pins.

At the same time, by using elastic hinges and straps, the patient has some freedom of motion in derotation or reposition so that he can get his hand around an object, wheel his chair, and do more things without taking the splint off.

It is also felt that proper positioning in the splint forestalls the typical adduction-extension contracture and at the same time the muscles of opposition are relieved from stretch.

The muscles of derotation have to pull against the elastic, and thus work in a more normal reciprocal pattern, with the elastic helping to replace the antagonists' lengthening contraction.

The difficulties we have found to date are as follows:

1. Because we use a light-weight plastic (1/16″) for better fit and less weight, we have a moderate amount of breakage.

2. On a severely atrophied hand it is sometimes difficult to avoid pressure areas and still maintain good position of the thumb. It is also difficult to fit one on a tight hand that is in poor position due to lack of good treatment.

3. The splint is an artificial device, and of course, can not even come close to doing what the original muscles did.

In conclusion, we have made about 20 different models of splints using palmar and dorsal styles, and finally arrived at two dorsal types which we used for about six months. These were very difficult to fit to the patient, and because they were almost inflexible, the breakage rate was very high. It was also difficult to put them on a hand with severe muscle involvement. (These were pictured by Bellevue in *Self-Help Devices for Rehabilitation.*)

A year ago, we began a little different version of this splint, using a leather hinge to facilitate the putting on of the splint and added a snap with an elastic strap to hold it on. This cut down the breakage considerably, but we still had little motion of the thumb within the splint.

For the past three months we have been using a more flexible hinge (elastic and leather) which we feel at this point is the most successful. The splint as it is now can be made by any therapist or tech-

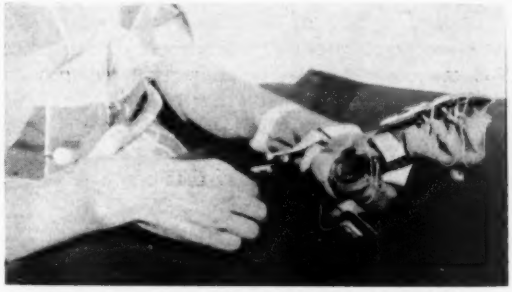
*Second of a series of illustrations of apparatus aids toward independent activities as designed and constructed in the occupational therapy department of the New York State Rehabilitation Hospital, West Haverstraw, N.Y.

nician who understands the physiology of the hand and the techniques of plaster and plastic. The advantages of this are obvious, because the splints can be made in a day or two.

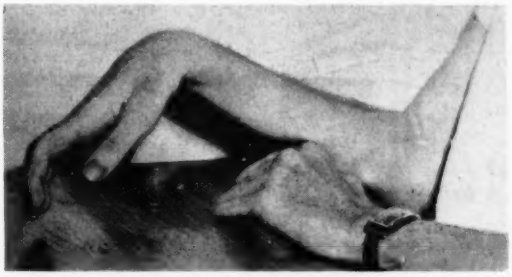
Spastic Hemiplegic Hand

In addition to the opponens splint, wrist cock-up and finger extension splints are also made. Many combinations are possible, which are made according to the needs of the patient.

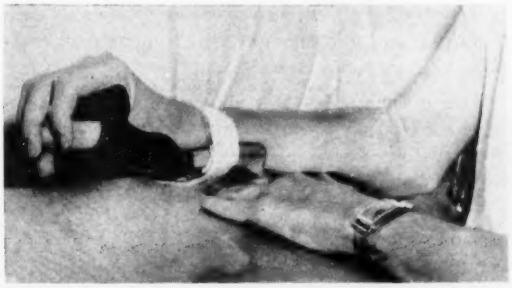
The method of making a plaster model and a clay mold is pictured in numbered steps by photographs. For this type of splint, we use 1/8" plastic and reinforce the stress points with aluminum. Any appendages, such as the finger extension mechanism, are also made of metal.



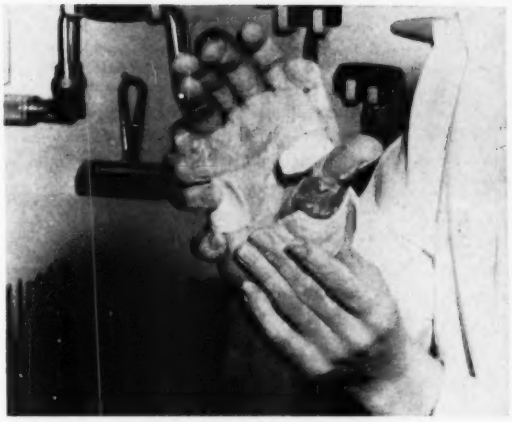
Cock-up finger extension including thumb with abductor roll for positioning of hand. Used for prescribed periods during the day.



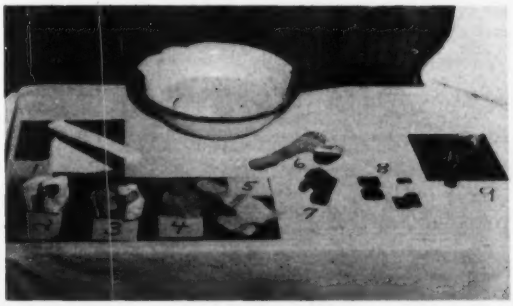
Polio—severely weakened wrist, fingers and thumb.



Palmar wrist splint including the thumb supports hand in functional position.

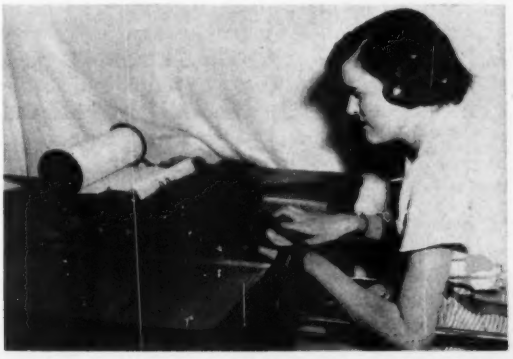


Applying Plaster Mold



Steps Followed

Some splints made and used at N.Y.S.R.H.



Using simple plastic finger extension splint to gain passive finger extension at m.c.p. joint or increased finger flexor resistance.

SCOTAVS*

MILDRED FRISCH, O.T.R.

SCOTAVS (Southern California Occupational Therapy Association Volunteer Service) is a new group recently organized in Southern California. SCOTAVS is unique in that its primary aim is to use men volunteers on a community wide basis to construct adapted equipment for occupational therapy departments in major hospitals in Los Angeles and surrounding areas. Never before has this type of volunteer group been organized.

It is the purpose of this paper to explain the existence of SCOTAVS and its present program so that other communities might be stimulated to attempt a similar volunteer plan which has proved so successful in this area. SCOTAVS has been in existence but a short time but already has attracted considerable attention and commendation from both professional personnel and organized community groups.

SCOTAVS came into existence to meet the need for adapted equipment in institutions following a survey made in the city of Los Angeles and surrounding areas. Due to lack of resident personnel, time and money, it was impossible for most therapists to satisfy patient needs. Students enrolled in Miss Margaret Rood's equipment theory and laboratory class at the University of Southern California, as a class requirement, constructed such items as cock-up splints, feeding devices, Montessori boards and special equipment for respirator patients such as painting sets, checker and chess games. Conversations, lectures and field trips by Miss Rood made the class more aware of the need some institutions have for additional adapted equipment.

To satisfy this need it seemed to the writer that it would be feasible to organize men volunteers to construct adapted equipment. Therefore in partial fulfillment of requirements for graduation, the writer made a survey of a cross-section of occupational therapy departments and organized groups in Los Angeles and surrounding areas in the hope that a workable plan would be formulated to use male volunteers in the construction of adapted equipment. An attempt was made to get answers to certain questions from directors of occupational therapy departments and representatives of organized service groups.

Directors of occupational therapy departments in major hospitals in this area were asked the following general questions:

What is your present volunteer program?

Do volunteers construct adapted equipment?

How would you utilize such groups of adapted equipment volunteers in your organization were this idea to organize male volunteers actually started? Would you use such volunteers as consultants and/or workers on standard or specialized equipment?

What type of equipment would they construct and in what amounts?

Adapted equipment, as used in this survey, was an all inclusive term meaning a functional or workable device made of any media or combination thereof, used to aid in the recovery of a patient or a chronically disabled person. Adapted equipment includes in this study both standard and specialized equipment. Standard equipment refers to equipment which can be constructed without reference to the special needs of a patient. Specialized equipment is used to mean equipment which must be constructed to satisfy the needs of an individual patient.

Representatives of organized groups in Los Angeles were personally interviewed. An attempt was made when possible to interview men who had some degree of status not only in the local area organization but also in the total city organization. Referral to the representative was usually made by the central office of that organization.

The initial approach in these interviews with representatives was to explain the project and its purpose. Questions naturally arose about the field of occupational therapy. The term "adapted equipment" was confusing to some laymen and in some instances had to be explained in detail. The representatives were asked how this plan could be incorporated into the aims of their organization. The final question was the procedure to be followed if this idea to organize male volunteers to construct adapted equipment were put into effect.

The general consensus of opinion from directors of occupational therapy departments and group representatives was that this idea to organize men volunteers to construct adapted equipment worthwhile and could be of benefit to both the community and the institutions involved. This survey indicated that the greatest and most immediate need for adapted equipment volunteers existed in the fields of poliomyelitis, cerebral palsy, homebound patients and in public supported institutions.

Therapists in the field of cerebral palsy suggested it would be worthwhile for men volunteers to construct adapted cerebral palsy equipment which had been previously analyzed and used suc-

*Condensed from a paper "ADAPT THE VOLUNTEER TO ADAPTED EQUIPMENT" written by Mildred Frisch, in partial fulfillment of requirements toward graduation from the occupational therapy department, University of Southern California.

cessfully. This equipment, as well as toys and games, could be distributed on a loan basis to parents and then returned when no longer useful. Suggestions for construction of equipment ranged from sling suspension stands, adjustable bed tables, splints, cord knotting frames, card weaving frames, lap boards, sandblock series, functional panel boards and collapsible wheel chair tables.

Community organizations displayed a surprisingly positive interest in the program and almost unanimously agreed to cooperate. Some groups went so far as to present this idea to their executive boards for approval. In one instance a committee was appointed to investigate the plan. It was generally agreed that this idea to organize male volunteers to construct adapted equipment had outstanding attributes, particularly for men who had retired and had time to construct equipment in their leisure time.

Since the response was so genuinely positive from both directors of occupational therapy departments and representatives of groups, SCOTAVS was immediately organized. A steering committee of ten therapists was chosen, who evaluated and clarified the aims of SCOTAVS and it was decided that the efforts of SCOTAVS be directed toward satisfying the greatest need as evidenced in the survey.

It was tentatively agreed that hospitals should be serviced by organized groups located near the hospital area and that plans for adapted equipment should be submitted by the hospital to these groups. The service groups, coordinated by SCOTAVS, would be responsible for carrying through the plans either in a central workshop or in individual home workshops.

The first volunteer group to become a part of SCOTAVS were the patients of Dr. Leonard Yamshon. Their program is unique in that here handicapped help the handicapped. The majority of patients that come to his offices are industrial accident cases whose treatment is paid for by insurance companies. Occupational therapy is prescribed for patients who have had traumatic injuries and they construct adapted equipment to be used by other patients.

Woodworking . . .

(*Continued from page* 93)

and leg amputees. They permit freedom of hands and arms and the full attention of the user may be devoted to the work.

A web safety belt is provided as a safeguard against toppling sideways or backwards. As an additional safety measure, an on-off switch on a long cord is also provided. This can be hung in a convenient position to be readily available at all times.

Para-Seat is simple but sturdy and anti-tilting legs assure stability. The frame, seat and handlebars will each support several hundred pounds, yet can be moved easily. The Shopsmith may be operated normally even with this device attached, an important consideration where the tool is being used by a group such as in occupational therapy departments, schools or vocational training centers.

Most important, of course, is the fact that any power woodworking operation can be performed on the Shopsmith by paraplegics using the seat. *Para-Seat* makes it safe and practical for paraplegics to work with power tools, not only for woodworking but also in industrial machine shops, since it can be modified to fit almost any power tool.

1953 NATIONAL CONFERENCE INQUIRIES

Are you a budding Rembrandt? Let your fellow occupational therapists be the judges.

Paintings by occupational therapists will be exhibited at the 1953 conference in Houston, Texas. If you have any artistic leanings, let the rest of us in on them.

To enter the exhibit is a simple procedure. Just fill out two forms giving the artist's name, address, present position, title of picture, technique (crayon, oil, etc.). Send one form to Dorothy S. Hines, 4616 Evergreen Street, Bellaire, Texas. Attach the duplicate form to the back of your picture which should also be sent to Dorothy S. Hines. Be certain to include all the information requested.

DEADLINE: *November* 5, 1953. *Pictures must be matted or framed.*

Ideas are now being assembled for the educational exhibits to be shown at the 1953 conference. If you have any interesting educational exhibits in mind, please send suggestions to Dorothy S. Hines.

Proceedings are available of the second national conference of the placement of the severely handicapped sponsored by the American Federation of the Physically Handicapped. The proceedings include panels on epilepsy, multiple sclerosis and muscular distrophy, arthritis and rheumatism, orthopedic disabilities, deafness and hearing disabilities, blindness and visual disabilities, cardiovascular disabilities, cerebral palsy and cancer. Copies sell for $3.00 per copy and may be ordered from A.F.P.H. headquarters, 1370 National Press Building, Washington 4, D.C.

Book Reviews

THE TREATMENT OF INJURIES TO THE NERVOUS SYSTEM

Donald Munro, M.D., F.A.C.S.
W. B. Saunders Co., Philadelphia
1952 $7.50, 284 pages

Reviewed by: Florence Stattel, O.T.R.

This book was written primarily for the general surgeon and the general practitioner, but nevertheless is an excellent reference for occupational therapists.

General consideration of injuries, diagnoses, symptoms and treatment pertinent to each type of injury is clearly presented.

For occupational therapists treating injuries to the nervous system this book should prove extremely valuable as it provides a better understanding of the patient's injury, his medical care and treatment as recommended by Dr. Munro.

Treatment varies and a medical staff may take exception to some of the methods of treatment. However it is vital for occupational therapists to know what the leading neurologists are suggesting. Therefore this book is recommended to interested occupational therapists.

MULTIPLE SCLEROSIS

Edward E. Gordon, M.D.
National Multiple Sclerosis Society, 1952

A valuable reference manual on multiple sclerosis that deals with the evaluation of the disability, a program for rehabilitation and specific treatment procedures.

The manual is clearly illustrated and should prove a handy reference for physicians, therapists and patients.

DEAF CHILDREN IN A HEARING WORLD

Miriam Forster Fiedler, Ph.D.
The Ronald Press Co., New York
1952 313 Pages, $5.00

A report of a five year study of the adjustment of deaf and hard-of-hearing children and their parents at the four weeks Vassar Summer Institute for Family and Community Living.

Although recognizing the special educational needs of the handicapped children, the study reveals that basic requirements for all children pertain to the deaf and hard-of-hearing. The book has valuable information for parents and personnel working with the hearing handicapped children.

The book deals with the adjustment of the handicapped children, their acceptance in the normal group and the problems of the parents in a case study presentation that is most readable as well as instructive.

PSYCHIATRY AND MEDICAL EDUCATION

American Psychiatric Association, Washington, D.C.

The American Psychiatric Association and the Association of American Medical Colleges present, in book form, a report of the Conference on Psychiatric Education held at Cornell University in June, 1951.

Emphasis was placed on the problems of improved teaching so that the medical student, and especially the psychiatric student, is more aware of his community obligations in meeting the emotional needs of his patients.

An interesting section gives a brief resume of medical education which in this country is a very new development and only in recent times have American schools been able to compete with European colleges.

The book is a condensation of the discussions of the conference which were conducted by a group of deans of medical schools, psychiatrists, sociologists, social workers and others concerned with medical education.

The appendix lists the articles prepared in advance of the conference and mimeographed copies of these monographs are available from the American Psychiatric Association, Washington, D.C.

OPHTHALMIC GLOSSARY

M. R. Goldman, M.D.
Richard Rimbach Associates
1952 $2.50, 40 pages

A comprehensive glossary of the field of ophthalmology that will be helpful to all associated in eye work.

PROTECTIVE BODY MECHANICS IN DAILY LIFE AND IN NURSING

Margaret Campbell Winters, R.N., P.T.
W. B. Saunders Company
1952 150 pages

A manual presenting the principles of body mechanics, factors influencing body alignment and movement and the principle of body mechanics in the activities of the patient and the nurse.

Although especially written for the nurse, occupational therapists will find the material pertinent to their problems of daily activity and patient care.

It is an excellent manual for student reference in learning the value of maintaining proper body positions while on an active treatment program. The illustrations clearly show how to correct any improper alignment in bed, walking or sitting, a necessary procedure before treatment can begin.

NEW METHOD OF USING FINGER PAINTINGS

Warren S. Willie, M.D.

The Psychiatric Quarterly Supplement, Part 1, 1952

An article on the technique of finger painting using concepts for the paintings rather than allowing the mentally ill patient to paint at random.

The article is well illustrated and is a medical interpretation of the technique described by the therapists from Ypsilanti State Hospital in their article in A.J.O.T., Vol. IV, No. 3, 1950, page 100.

The concepts are derived from stimulus words uncovered during psychiatric interviews. "This method has been found extremely valuable in obtaining fantasy material and compares favorably with the Rorschach test in giving information about the dynamics of the patient's illness."

YOUR CHILD CAN BE HAPPY IN BED

Cornelia Stratton Parker
Thomas Y. Crowell Co.
1952 $2.95 266 Pages

Running low on ideas for stimulating activities for children? Need low cost projects children can do at home or in your department? Mrs. Parker's new book will solve your problems as each page has interesting suggestions and, best of all, the activities use salvage or inexpensive materials readily available in the hospital or the home.

The suggestions in this book are practical, interesting and artistic suggestions, clearly described, for entertaining a sick child regardless of the length of his convalescence.

Also incorporated into the book are ways of encouraging the child to do things for himself, the adjustment of the activities to the various age levels and an appendix for quick reference as to what a child enjoys according to his age.

A HOME PROGRAM

Edward E. Gordon, M.D.

National Multiple Sclerosis Society, 1952

There are three manuals prepared by Dr. Gordon, namely: "A Home Program for the Care of Bed Patients", "A Home Program for Wheel Chair Patients" and "A Home Program for Patients Ambulatory with Aids". All are similar using many of the same illustrations. However each is planned for its specific purpose and recommended for the particular case involved. Excellent manuals for reference use.

RESIDENTIAL TREATMENT OF EMOTIONALLY DISTURBED CHILDREN

Joseph H. Reid, Helen R. Hagan

Child Welfare League of America, Inc., New York

1952 $3.50, 311 pages

A study of the actual operations of twelve treatment centers in the country dealing with emotionally disturbed children. It includes three supported by public funds, nine from private funds.

The book describes the form of organization, the physical plant, admittance procedure, the staff, the treatment program and the after care.

It was interesting to note that in this field for which occupational therapy has so much to contribute only two centers employed occupational therapists, the rest used untrained workers for their activities program. The two employing occupational therapists were the Neuropsychiatric Institute of the University of Michigan, Children's Service, that employed two occupational therapists and the Langley Porter Clinic, Children's In-Patient Service, that did not list the number of occupational therapists but grouped them in a general list as "cooks, diet maids, occupational therapists, laboratory technicians, switchboard operators and similar central services."

WORKING PROGRAMS IN MENTAL HOSPITALS

Proceedings of the Third Mental Institute, Louisville, Ky.

American Psychiatric Association

1875 Massachusetts Ave. N.W., Washington, D.C.

1952 $2.50

Reviewed by: Wanda Edgerton, O.T.R.

All but four states in the United States and all but one of the Canadian provinces were represented at the institute reported in these two hundred readable pages. Psychiatrists, nurses, business managers, board representatives, budget officers, members of boards of control and planning groups entered freely into discussion of their common problems.

Running like a theme throughout is the constant expression of a need for better communication and understanding between all members of the hospital team at all levels, from porters to superintendents, in order to improve all aspects of treatment of the patient. There are some excellent reports on what is being done at various institutions for better training of personnel on the job, developing unity of purpose and treatment by breaking down professional barriers and jealousies.

The one prepared paper is a stimulating and enlightening one by Dr. Edward J. Stieglitz on "The Aging Process". This is required reading for department heads who will find much provocative material they will want to pass on, in part if not in the whole, to their staff and students.

MASTERING YOUR DISABILITY

Harold A. Littledale

Rinehart & Co., Inc.

224 pages $2.75

A book written by an orthopedically handicapped person for the handicapped. Especially valuable for patients who are discouraged about their conditions, but a challenge to all. Includes letters from severely handcapped people who have solved their problem and these personal experiences should help any patient strive for his own solution to his problem.

This book is recommended reading for all occupational therapists who will welcome such a text for handicapped patients and their families. The challenge of the future and problems yet to be solved and the social gains still lacking are presented so factually and unemotionally as to inspire deep thought and dispel complacency in all working with the handicapped. A strong case for united community action is effectively presented .

Mr. Littledale is remembered by readers of A.J.O.T. as the illustrator of Miss Mary Eleanor Brown's articles, "Daily Activity Inventory and Progress Record for Those with Atypical Movement," Vol. IV, Nos. 5 and 6, and Vol. V, No. 1. He uses similar clever illustrations in his book to demonstrate certain activities. However these are at a minimum, the written material being clearly defined without need of illustrations.

PERSONALITY IN THE MAKING

Edited by

Helen Leland Witmer

Ruth Kotinsky

Harper & Bros., Publishers

446 pages $4.50

This is the fact-finding report of the Midcentury White House Conference on Children and Youth which aims to help parents, educators, community leaders and professional people to the best knowledge today on the healthy development of personality in children.

Particularly pertinent information for the occupational therapist is to "watch the child's emotional status in relation to his age and previous level of development."

The fore part of the book deals with the influence on personality of congenital characteristics, physical limitations, parent-child relationship, economic environment, prejudice and discrimination and religion.

The latter part of the book covers the cultural anthropology of the American child in relation to the various forces of his society including the family, school, church and community services.

The purpose of the book is to present a study of the basic principles that contribute to a happy and responsible personality so that future studies can utilize these fundamental concepts for the benefit of society. It is a well written book that is an excellent summary of our present knowledge of personality.

YOU AND YOUR AGING PARENTS

Edith M. Stern with Mabel Ross, M.D.

A. A. Wyn, Inc.

1952 $2.75, 212 pages

A well written, easily read book on the problems of aging parents. Written to help the reader in his problems, it would make excellent reference material for anyone advising older people and their families. It is the type of book that can be recommended for their consideration.

The book covers the general problems of aging parents or relatives, being specific about the problems common to all confronted with this problem. In part one, Miss

Stern and Dr. Ross summarize the purpose of the book in these words, "In this book, we are going to point out and suggest how you can do your job with the least possible annoyance and irritation and the greatest possible amount of contentment and happiness for all concerned."

CLINICAL APPLICATION OF RECREATIONAL THERAPY

John Eisele Davis, M.A., Sc.D.
Published by Charles C. Thomas
Reviewed by: Wanda Edgerton, O.T.R.

The author defines recreational therapy as, "medical employment of free play, exercise and activity to meet treatment aims." Recreation as a therapy he conceives as a social science in which non-verbal activities become significant means of communication.

Within the brief span of some one hundred plus pages he examines the rationale, various theories and levels of play and the aims of recreational therapy. He gives some specific attention to special types of patients, as those who have undergone electric shock or pre-frontal lobotomy, with sample charts for noting observations of reactions and behavior.

SELF-HELP DEVICES FOR REHABILITATION

Institute of Physical Medicine and Rehabilitation
1952 106 pages

This booklet presents pictures, descriptions and buying sources of a number of articles of a general nature including descriptions of some special clothing.

This booklet is No. 5 of a series of a cooperative service project made possible by the National Foundation for Infantile Paralysis and conducted by New York University-Bellevue Medical Center.

SHELTERED WORKSHOPS AND HOMEBOUND PROGRAMS

A Handbook
National Committee on Sheltered Workshops and Homebound Programs
1952 $1.00, 84 pages

A comprehensive handbook defining a sheltered workshop, surveying community for needs and determining the program, organizing and financing the agency and the physical plant needed.

Also outlined are the problems encountered in determining work projects, establishing markets, job placement, wages and cost analyses.

BLOCK PRINTING ON FABRICS

Florence Harvey Pettit
Hastings House
1952 146 pages, $5.00
Reviewed by: Henrietta G. Price, O.T.R.

From the delightful block printed binding to its last informative script and fascinating illustrations, this book is one that all occupational therapists will want to own.

The first part of the book, and indeed all through the book, Mrs. Pettit emphasizes the importance of good design suitable to projects and their uses.

Next, we delve into techniques with many helpful hints such as warming your linoleum block before cutting or the use of a damp cloth under the material to be printed.

Good suggestions such as many before-hand sketches, try-outs with art gum blocks, or stencils, method of enlarging designs, and a splendid chapter on "Color" are included.

A clipping file is mentioned as being helpful as one finds design motifs all around us: from the borders on old Greek or Persian bowls to the back yard cherry branch or maple leaf; even to the bright magazine ads.

"Remember that even if you must at first copy to gain experience, eventually your hand-made article will also be brain-made and that will bring you much excitement and satisfaction."

By the time you get to the end of the book if you have never tried block printing, you will be eager to start. Or, even if you think you are already pretty good, you will hasten to improve your design and technique.

The chapter on "Projects" is delightfully illustrated and ends with the remark: "So, work carefully, work well, and have fun!"

The directory of tools and materials, especially the use of color-fast inks is most valuable. Prices of these necessities and a good bibliography add much to this book.

SUNSET LEATHER CRAFT BOOK

Doris Aller
Lane Publishing Co.
1952 95 pages, $1.75 paper bound
$3.00 library bound

A new book on leather craft that contains clear-cut, detailed instructions, large patterns for many handbags, gloves, moccasins, belts, billfolds and toys. Project steps and finished products are excellently illustrated with photographs.

The unusual projects of good design make this a distinctive and desirable craft book.

THE POWER OF POSITIVE THINKING

Norman Vincent Peale
Published by Prentice Hall
1952 $2.95
Reviewed by: Wanda Edgerton, O.T.R.

An antidote for the pressures and tensions of fast paced modern living. Here is a simple formula, simply expressed and palatably capsuled, useful in the home treatment of soul weariness, irritability, pessismism and paranoid tendencies of thought. Further recommended for such vital deficiencies as loss of faith, good humor and serenity in the face of obstacles.

Probably you already practice most of the techniques prescribed, but it's handy to have this book on hand when your own reserves run low, or as a ready reference for troubled friends. And if you chance to be short on that last item, troubled or otherwise, there's a chapter on how to cultivate more.

BORN OF THOSE YEARS

Perry Burgess
Henry Holt and Company, 1951 300 pp., $4.00

An experience packed autobiography of the author of *Who Walk Alone*. Mr. Burgess has lived a full and busy life dedicated to the Leonard Wood Memorial and through his recount of this life has given a global description of the advances made in leprosy.

His recounts include other people all over the world made known to us by their books on medical experiences, by our study of world problems and by World War II and the Korean War.

His flora descriptions and his wide acquaintances make this book delightful and pleasant reading as well as educational.

HOW AM I DOING?

Self Appraisal For The Aspiring Executive
Robert F. Moore
B. C. Forbes and Sons Publishing Co. Inc., 1952
Reviewed by: Wanda Edgerton, O.T.R.

Though designed for the young executive in business or industry there is food for thought in this one hundred forty page volume, for the professional person. Chapter headings include such provocative titles as, "How long is

a Rut"? "Blueprinting Your Future," Techniques for Changing Jobs," "Dynamics of Achievement," "Maturity, Prosperity, Security."

For convalescent patients such a book might not only motivate, but help to steer an entirely new course in intelligent job planning. Additional copies of a self-rating chart included in the text are obtainable from the publisher.

The author is general manager of a New York firm of industrial consultants, teaches a course on "Developing Executive Abilities" at Columbia University and served as president of New York Adult Education Council.

RHYTHMS AND DANCES FOR ELEMENTARY SCHOOLS
Dorothy LaSalle, Ed.D.
A. S. Barnes & Co., New York, 1951 $4.00

Reviewed by: Isabel March Kellogg, O.T.R.

This volume presents an outstanding collection of fundamentals and characterizations of music; singing games and folk dances. It is a text which could well be used by a teacher with little experience in teaching folk dancing. The material is well written and presented. The music for the rhythmic activities is arranged in easy form to facilitate its use. There is a convenient listing of rhythms and dances and folk dances by countries. It contains a discussion of the use of dancing in the elementary school; movement fundamentals; characterizations; singing games; simple folk dances; intermediate folk dances; and advanced folk dances. There is a complete glossary of dance steps, terms and formations.

STATE RECREATION ORGANIZATION AND ADMINISTRATION
Published by
A. S. Barnes and Company $3.50

Reviewed by: Wanda Edgerton, O.T.R.

Designed as a classroom text this book is directed also toward state planners and legislators, and all laymen concerned with the promotion and development of recreation as a human service. State plans in operation in North Carolina, Vermont and California are described. Organization and administration of state recreation and services through such other agencies as education, welfare and health are discussed.

Abstracts

CARE OF SEVERELY PARALYZED UPPER EXTREMITIES
Robert L. Bennett M.D., and Hazel Royall Stephens, R.P.T.
The Journal of the American Medical Association
Vol. 149, No. 2; May 10, 1952

Reviewed by: Lenore Secord, O.T.R.

The purpose of this paper is to outline methods of care of the patient with severe flaccid paralysis of the upper extremities and to discuss ways and means of increasing functional capacity through the use of adaptive apparatus. This paper is from the Georgia Warm Springs Foundation, and was read before the section on physical medicine and rehabilitation at the one-hundredth annual session of the American Medical Association, Atlantic City, June 15, 1951.

Of especial interest to occupational therapists are:

1. A basic opponens splint with wrist attachment. Illustrated.
2. An extension assistive attachment on a wrist splint enabling very light rubber bands to substitute for finger extensors.
3. The apparatus most commonly used to assist and encourage voluntary motion in the shoulder: the overhead sling and lapboard. Illustrated.
4. A feeder which consists of a cradle for the forearm attached to an overhead sling by a swivel joint to permit flexion and extension of the elbow and horizontal circular movements of the forearm. As the patient shifts his body toward the side with the feeder, the elbow is depressed and the hand brought inward. The opposite motion raises the elbow and lowers the hand. This method is used by patients in whom no shoulder elevation or depression is possible. Illustrated.
5. A feeder mounted on a stand with the same swivel joint permitting the same motions as in the sling feeder, for those patients with some power to supinate the hand and flex the fingers. Illustrated.
6. Adapted T-bar to hold spoon or fork to hand splint or feeder cradle. Illustrated.
7. Methods of turning the feeding plate by a lazy-susan type of apparatus.
8. Personal hygiene, writing, typing, and telephone adaptations (illustrated), for the severely involved patient.

The occupational therapist working with poliomyelitis patients should find some valuable illustrations and explanations in the use of adaptive apparatus with the severely involved upper extremity patients from an institution that specializes in that disease.

ANNALS OF WESTERN MEDICINE AND SURGERY
July, 1952
Rehabilitation of Peripheral Nerve Injuries
John Aldes, M.D., Arthur Bockstahler, O.T.R., and Lionel Lieberman
Los Angeles

A brief study of the common factors influencing the rate of progress in the rehabilitation of peripheral nerve injuries and the program for rehabilitation. The latter is divided into the acute phase, subacute phase and chronic phase.

Although the success of each phase is determined by the rehabilitation team, "the final success of treatment is in the hands of the patient, who must realize that without regular daily use of the affected limb in his vocational and social activity, best functional results cannot be obtained."

Have You Tried . . .

(*Continued from page* 96)

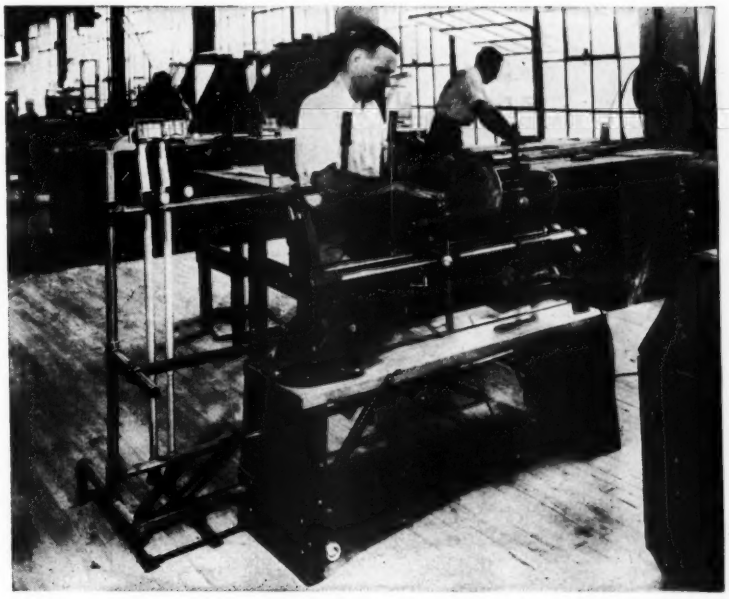
easy wrapping or mailing by patients, most of whom expect to use their completed leather projects as gifts.

* * *

BOUNCING PUTTY (S. R. Gittens) is now approved by the American Medical Association for therapeutic exercise of the fingers. This putty is fun to use and a welcome variety in an occupational therapy department for patients who want to doodle. It so intrigues the patient he is not even aware of the amount of therapeutic exercise he is receiving during this activity period.

* * *

PEMCO CORPORATION has reprints available of the article entitled "Clay Play" by Julia Hamlin Duncan which appeared in *Family Circle* magazine. You may obtain these reprints free of charge.



FAMOUS SHOPSMITH WORKSHOP TOOL NOW EQUIPPED FOR O.T. USAGE

Many handicapped people have been unable to participate in a full range of woodworking activities, either for therapy or for a hobby, because of difficulties in working with power tools. The new "Para-Seat" recently developed for use with the famous SHOPSMITH now makes it possible for paraplegics, amputees and other handicapped persons to do power tool woodworking in comfort and safety.

The "Para-Seat" features a comfortable, saddle-type seat which can traverse the length of the SHOPSMITH and can be adjusted to any height desired. Adjustable handle bars provide chest-support to prevent forward-falling, at the same time leaving hands and arms free to work. In combination with SHOPSMITH, the only true multi-purpose tool, this device makes it practical for paraplegics and amputees to perform a complete range of woodworking activities in a small area.

The "Para-Seat"-SHOPSMITH combination brings many new advantages to O.T. work. Projects started with hand tools can be brought to more satisfactory completion; many more useful and complicated things can be made. A different and wider range of hand and shoulder activities can be developed than is possible with hand tools alone. Patients will feel that their O.T. has practical value beyond the acquisition of muscle skills; their interest and cooperation will increase. Many of the gross muscle activities involved in sitting, bending, lifting, pulling, stretching and balancing, will be aided and improved.

Every center of O.T. activity will be able to use the "Para-Seat"-SHOPSMITH combination to advantage. It opens new horizons in vocational rehabilitation activities.

Ask us for more details on "Para-Seat" and SHOPSMITH. Demonstrations can be arranged in most places in the United States.

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